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Water Resources Data Florida

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Water Year 1986

Volume 4. Northwest Florida

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U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-86-4
Prepared in cooperation with the State of Florida
and with other agencies

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

Water Resources Data Florida

Water Year 1986

Volume 4. Northwest Florida

by P.E. Meadows, J.B. Martin, and P.R. Mixson

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT FL-86-4
Prepared in cooperation with the State of Florida
and with other agencies

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UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

Prepared in cooperation with the
State of Florida
and with other agencies as listed
under cooperation

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U.S. Geological Survey
227 North Bronough Street, Suite 3015
Tallahassee, Florida 32301

1987

PREFACE

This volume of the annual hydrologic data report of Florida is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Florida are contained in four volumes:

Volume 1. Northeast Florida
Volume 2. South Florida
Volume 3. Southwest Florida
Volume 4. Northwest Florida

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data. This report was prepared for publication by P. R. Mixson under the supervision of M. A. Franklin, J. B. Martin and P. E. Meadows. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data.

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This report was prepared in cooperation with the State of Florida and with other agencies under the general supervision of I. H. Kantrowitz, District Chief, Florida.

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16. Abstract (Limit: 200 words)
Water resources data for the 1986 water year in Florida consist of continuous or daily discharge for 277 streams, periodic discharge for 38 streams, miscellaneous discharge for 34 streams, continuous or daily stage for 77 streams, periodic stage for 20 streams, peak discharge for 88 streams and peak stage for 69 streams; continuous or daily elevations for 69 lakes, periodic elevations for 72 lakes; ground-water levels for 476 wells, periodic ground-water levels for 1226 wells, and miscellaneous water-level measurements for 1570 wells; quality-of-water data for 188 surface-water sites and 878 wells.

The data for northwest Florida include continuous or daily discharge for 51 streams, periodic discharge for 3 streams, miscellaneous discharge for 6 streams, continuous or daily stage for 1 stream, peak discharge for 41 streams, and peak stage for 41 streams; continuous elevations for 5 lakes and periodic elevations for 4 lakes; continuous ground-water levels for 13 wells, and periodic ground-water levels for 169 wells; quality of water for 25 surface-water sites and 20 wells.

These data represent the National Water Data System records collected by the U.S. Geological Survey and cooperating local, stage and federal agencies in Florida.

17. Document Analysis a. Descriptors

*Florida, *Hydrologic data, *Surface Water, *Ground Water, *Water Quality, Flow rate, Gaging Stations, Lakes, Reservoirs, Chemical analyses, Sediments, Water temperatures, Sampling sites, Water levels, Water analyses, Elevations, Water wells

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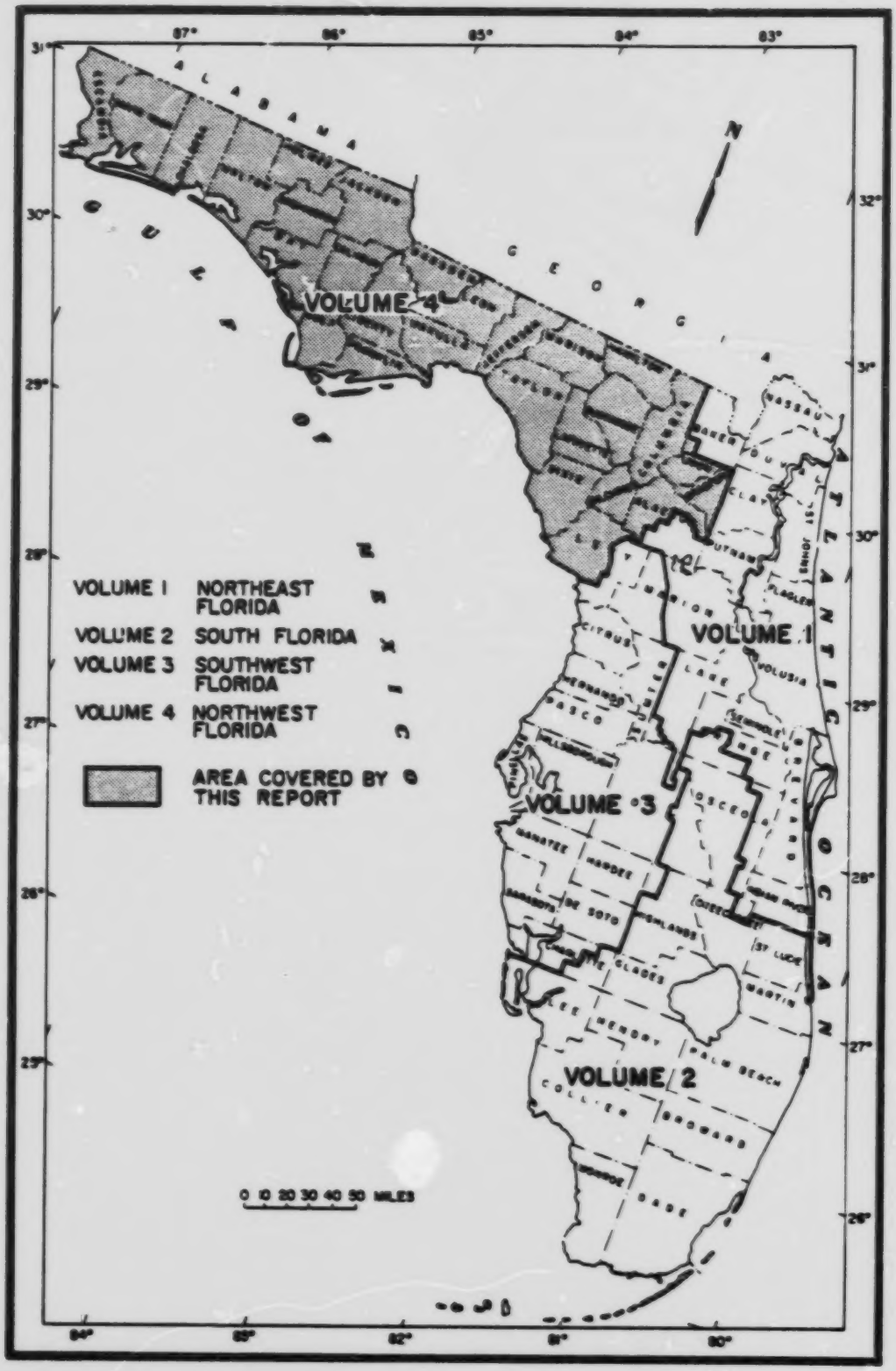

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INTRODUCTION

The Water Resources Division of the U.S. Geological Survey, in cooperation with State, local, and Federal agencies, obtains a large amount of data pertaining to the water resources of Florida each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in this report series entitled "Water Resources Data - Florida."

This report series includes records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 51 gaging stations; stage only at 1 gaging station; stage and/or contents at 9 lakes and reservoirs; water quality at 25 gaging stations and 20 wells; and water levels at 169 observation wells. Also included are data for 41 crest-stage partial-record stations. Additional water data were collected at various sites not involved in the network data-collection program. No discharge measurements were made at low-flow partial-record stations. Miscellaneous data were collected at 6 measuring sites.

This series of annual reports for Florida began with the 1961 water year with a report that contained only data relating to the quantities of surface water. For the 1964 water year, a similar report was introduced that contained only data relating to water quality. Beginning with the 1975 water year, the report format was changed to present, in one volume, data on quantities of surface water, quality of surface and ground water, and ground-water levels.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Florida were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-Water Supply of the United States." For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States," and water levels for the 1935 through 1974 water years were published under the title "Ground-Water Levels in the United States." The above mentioned Water-Supply Papers may be consulted in the libraries of the principal cities of the United States and may be purchased from Distribution Branch, Text Products Section, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

Publications similar to this report are published annually by the Geological Survey for all States. These official Survey reports have an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report FL-86-4." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale in paper copy or in microfiche by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the Office Chief at the address given on the back of the title page or by telephone (904) 681-7620.

COOPERATION

The U.S. Geological Survey and agencies of the State of Florida have had cooperative agreements for the collection of water-resource records since 1930. Organizations that assisted in collecting the data in this report through cooperative agreement with the Survey are:

Florida Department of Environmental Regulation
Florida Department of Transportation
Northwest Florida Water Management District
Suwannee River Water Management District
Escambia County Utilities Authority
Suwannee River Authority
County of Leon
County of Walton
City of Perry
City of Quincy
City of Tallahassee
Corps of Engineers, U.S. Army, Mobile District
U.S. Bureau of Land Management

Assistance with funds or services was given by the U.S. Army Corps of Engineer, Mobile District, in collecting records for 8 hydrologic gaging stations throughout northwest Florida.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Annual mean stream-flows were normal or above in the Northwest Florida area for the 1986 water year with the exception of the Apalachicola River which was below normal. The distribution of stream-flow was unusual with flows in the fall from normal to well above normal. This trend continued into winter with new maximum monthly means being set at several of the streams from the Big Bend area east. Beginning in February stream-flows began a steady decline which continued until June. Streams in west Florida continued the decline with near record minimum flows in July. Flows generally stabilized below normal during the summer months with some recovery occurring by September.

Average annual flow ranged from 64 percent to 190 percent of the long-term average flow for streams in Northwest Florida. Streams which receive most of their flow from drought stricken Alabama and Georgia, such as Escambia and Apalachicola Rivers, had the lowest yearly average flows. The Ochlockonee River had the highest runoff of 190 percent of the long-term average as a result of record or near record flooding from November through February.

Figures 2-8 present discharge hydrographs for some representative streams in Northwest Florida. The upper graph shows the 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record. The lower graph shows the monthly mean discharge for the period 1977-1986.

Ground Water

Water levels in the Floridian aquifer continued the recovery started in late summer of 1985 reaching levels from normal to well above median by early spring when a general decline started which continued through September. In the southern part of the area water levels were already well above normal by October as a result of heavy rains associated with Hurricane Eleana. Water levels in this area continued to be above normal for the entire year but were approaching normal by late summer. Water levels in the eastern part of the area fluctuated around median for the year while those in the Big Bend area set new record highs for the period January through March. Floridian aquifer water levels in the panhandle began the year at near record lows but recovered to normal by early winter and were only slightly below median at the end of the year.

Water levels in the sand-and-gravel aquifer in extreme western Florida continued the trend of being well below normal to new record lows for the area.

Figure 9.A-E presents water level hydrographs for some representative wells in the Northwest Florida Area. The graphs show the 1986 monthly maximum water level compared to the maximum, minimum, and median monthly maximum water level for the period of record

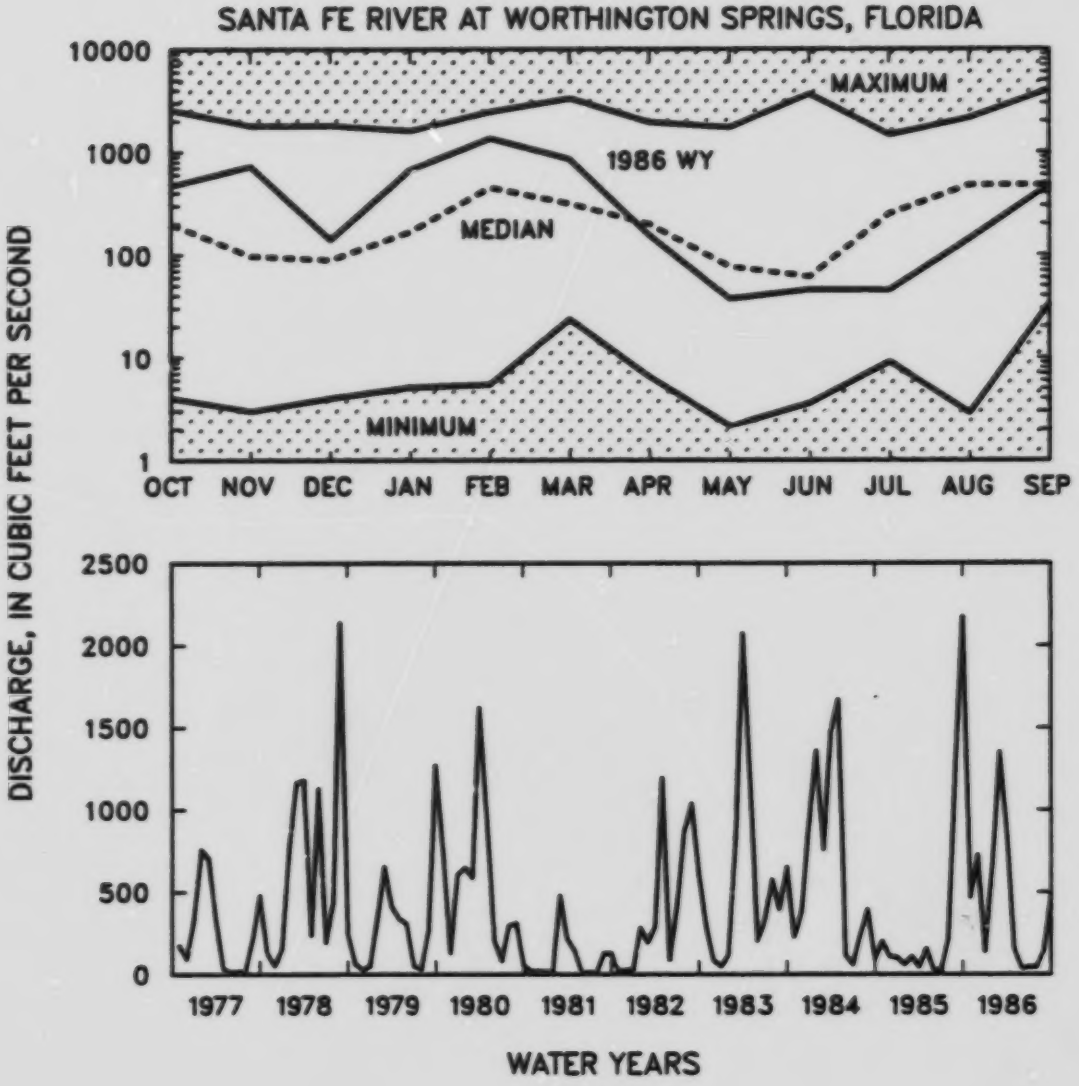

Figure 2.--Santa Fe River at Worthington Springs 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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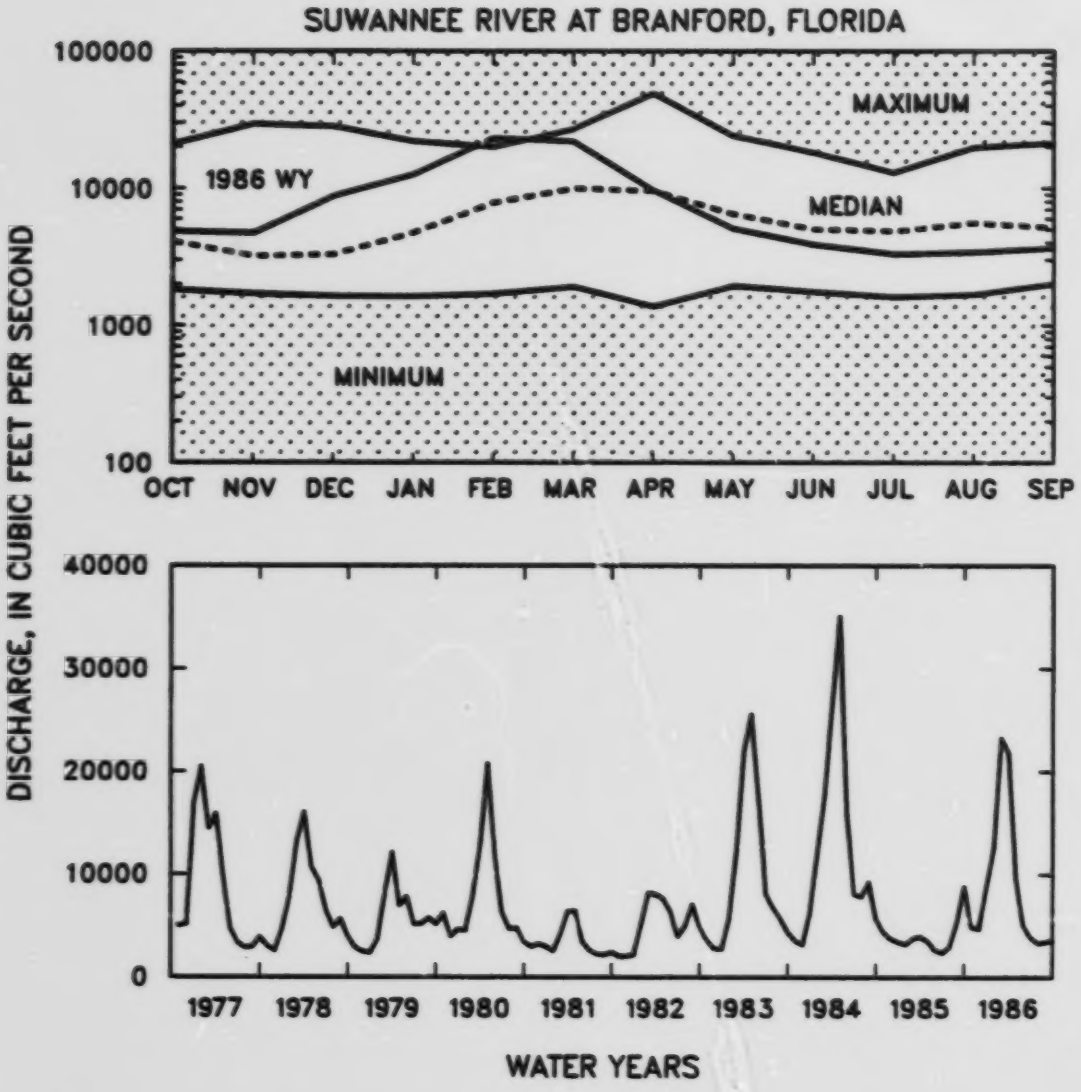

Figure 3.--Suwannee River near Branford 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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SUMMARY OF HYDROLOGIC CONDITIONS--Continued

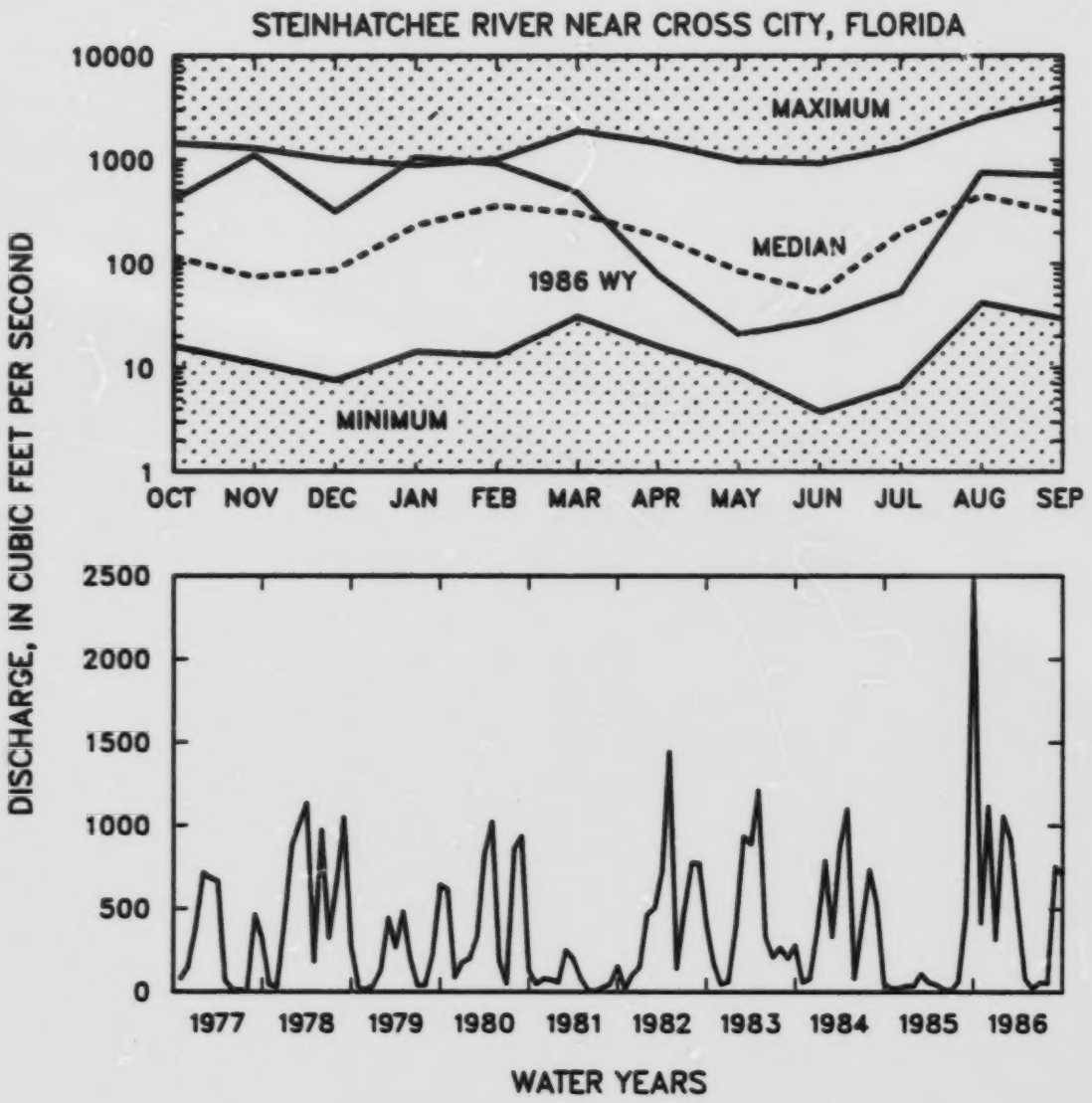

Figure 4.--Steinhatchee River near Cross City 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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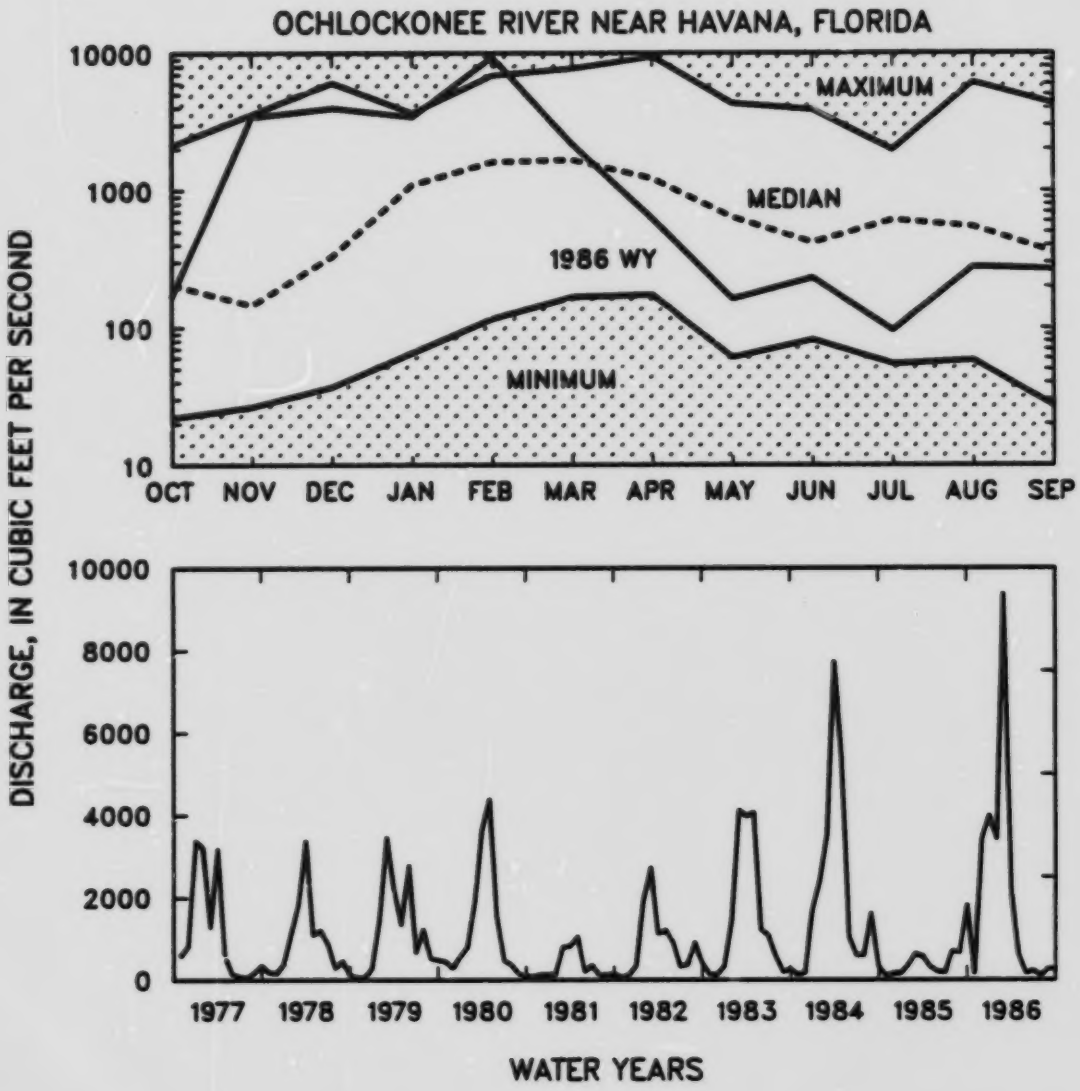

Figure 5.--Ochlockonee River near Havana 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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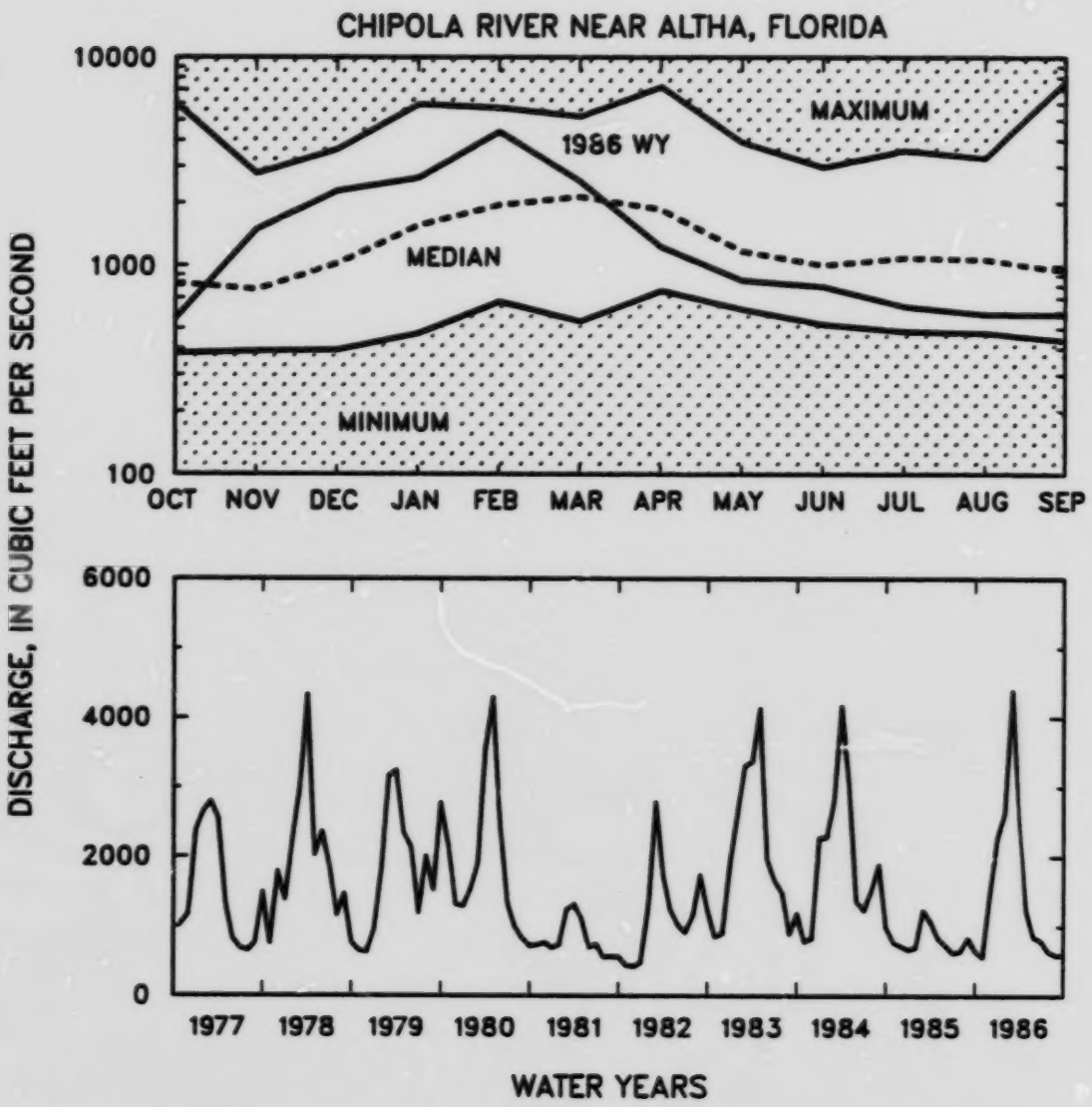

Figure 6.--Chipola River near Altha 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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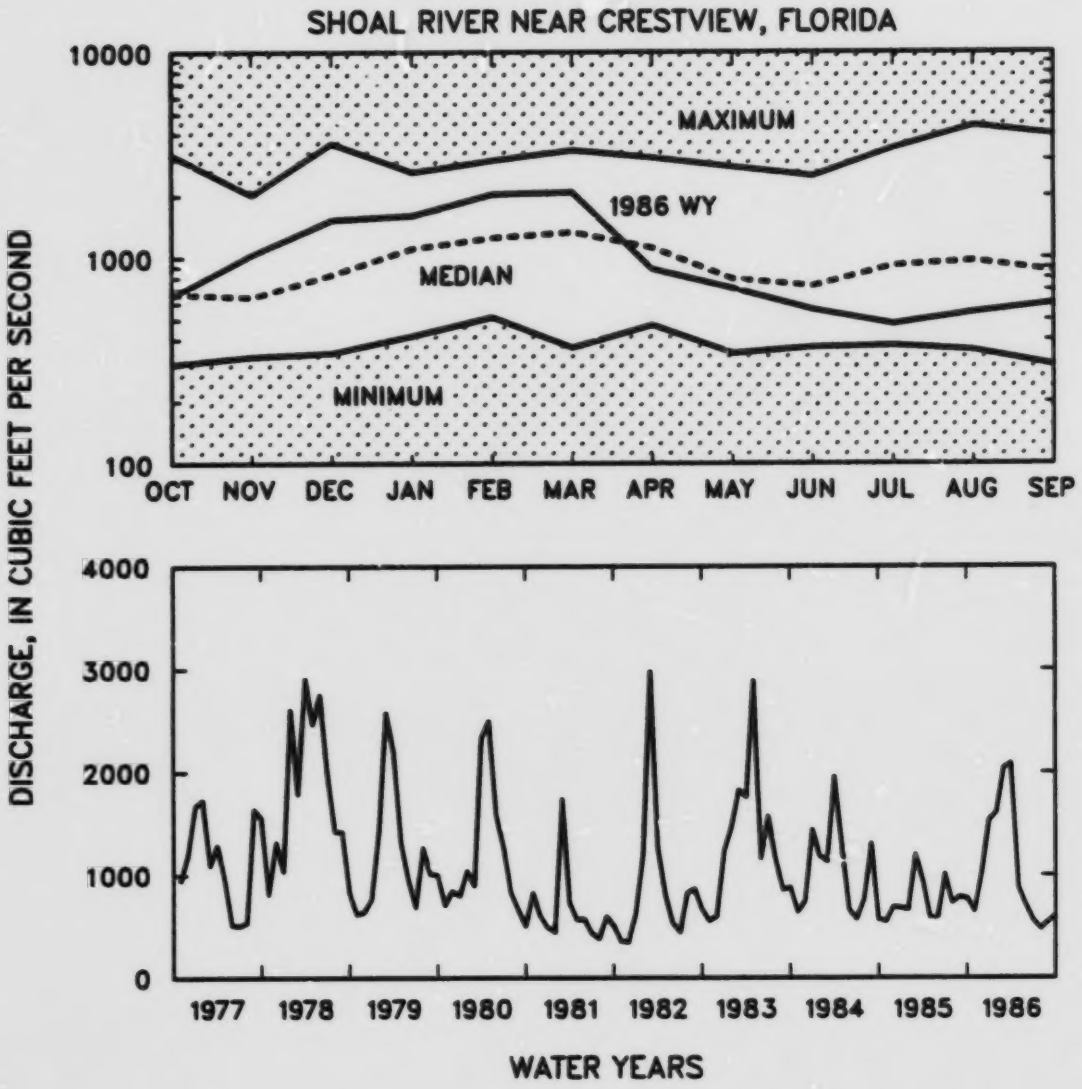

Figure 7.--Shoal River near Crestview 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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SUMMARY OF HYDROLOGIC CONDITIONS--Continued

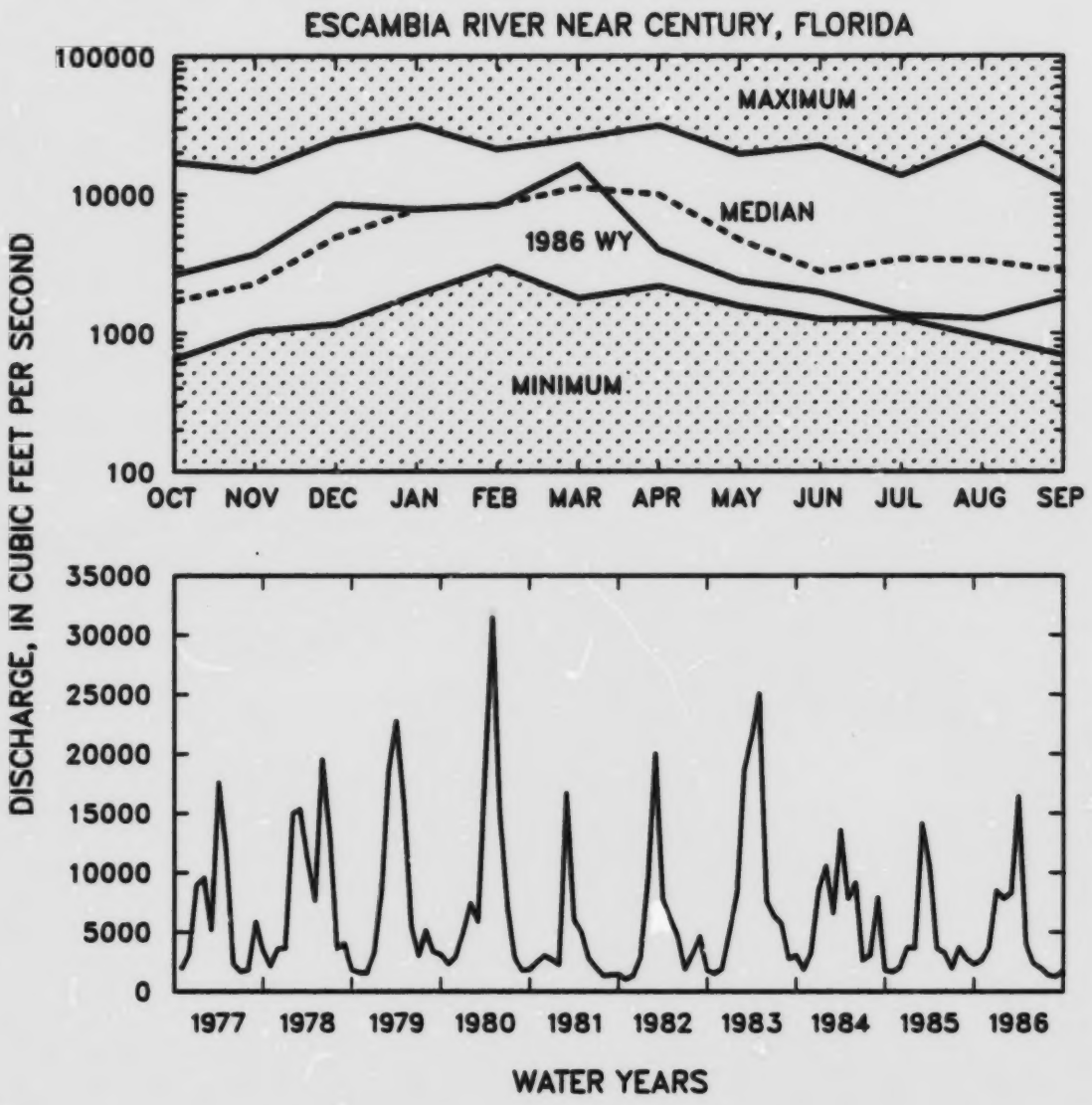

Figure 8.--Escambia River near Century 1986 monthly mean discharge compared to the maximum, minimum, and median monthly mean discharge for the period of record, and the monthly mean discharge for the period 1977-1986.

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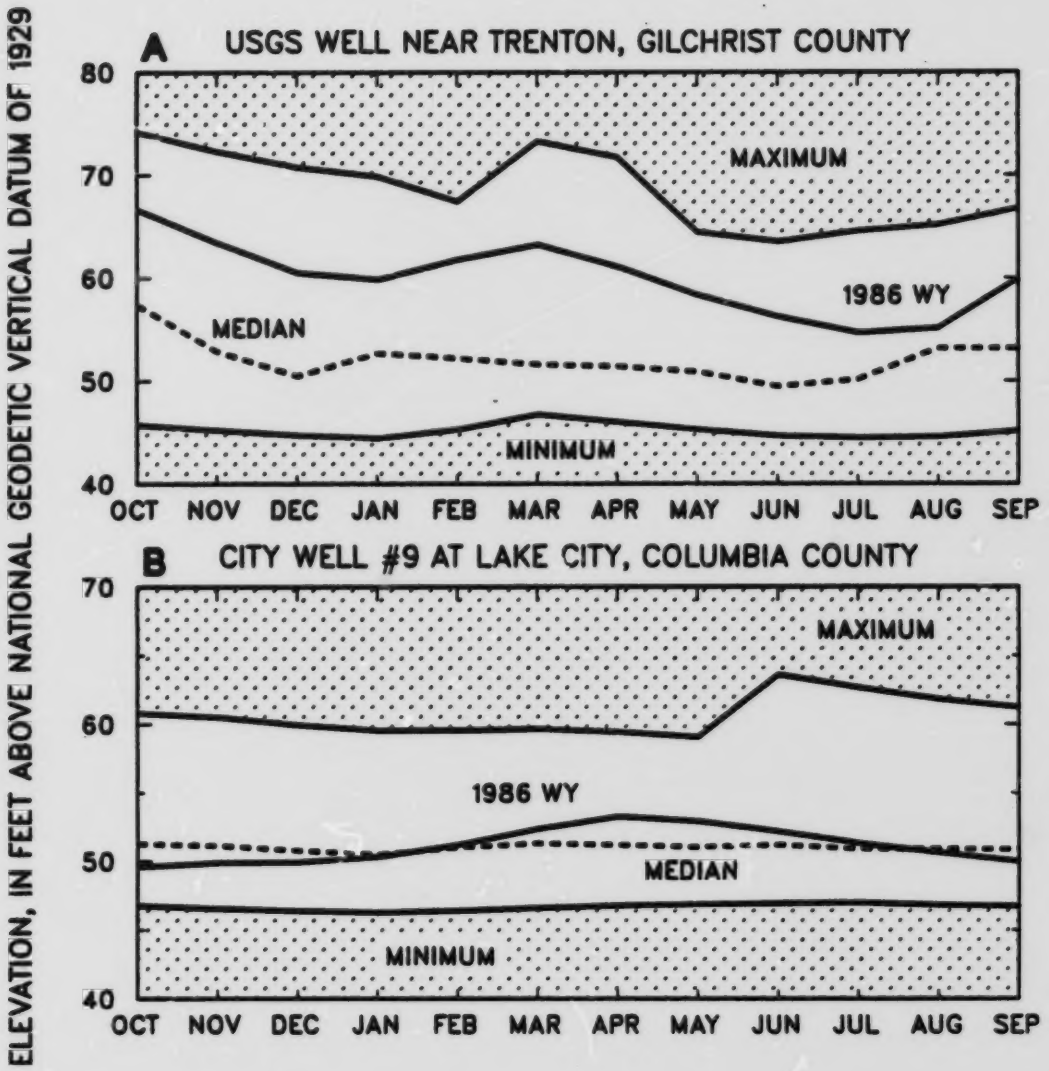

Figure 9.--1986 monthly mean maximum water level compared to the maximum, minimum, and median monthly maximum water level for the period of record for the following wells.

A USGS well near Trenton, Gilchrist County.

B City well #9 at Lake City, Columbia County.

C USGS well at Lake Jackson, Leon County.

D USGS well near Wausau, Washington County.

E USGS well at Ensley, Escambia County.

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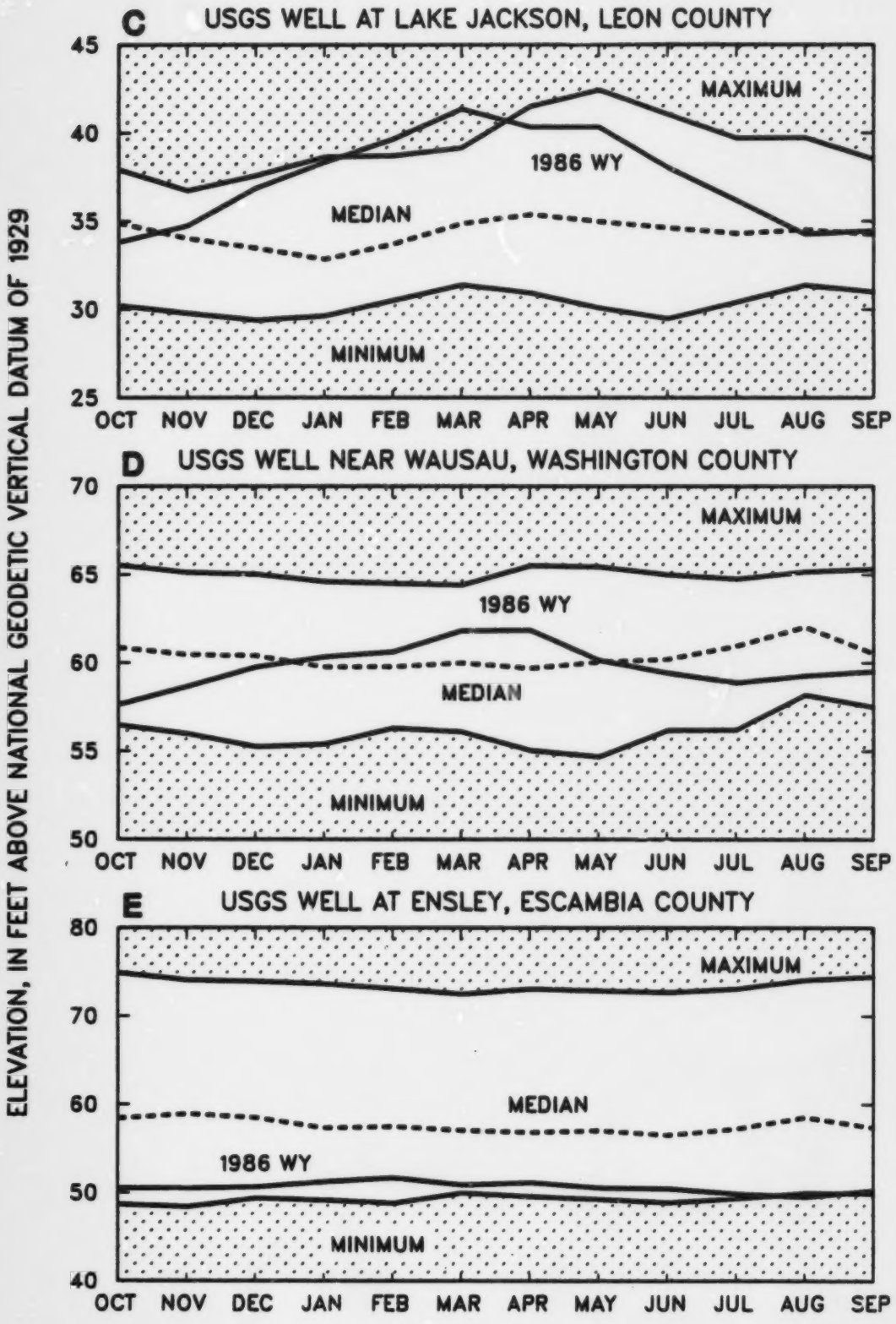
SUMMARY OF HYDROLOGIC CONDITIONS--Continued



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SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 57 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research. The NASQAN statons are shown in Figure 10.

The National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

Radiochemical Program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

▼3 NASQAN STATION
1. Perdido River at Barrineau Park
2. Escambia River near Century
3. Yellow River at Milligan
4. Choctawhatchee River near Bruce
5. Chipola River near Altha
6. Apalachicola River at Chattahoochee
7. Ochlockonee near Havana
8. St. Marks River near Newport
9. Aucilla River near Scanlon
10. Steinhatchee River near Cross City
11. Suwannee River at Branford
12. St. Marys River near Macclenny
13. Oklawaha River near Connor
14. Spruce Creek near Samsula
15. Withlacoochee River near Holder
16. St. Johns River near De Land
17. Hillsborough River near Zephyrhills
18. Alafia River at Lithia
19. Main Canal at Vero Beach
20. Kissimmee River at S65E near Okeechobee
21. Peace River at Arcadia
22. Myakka River near Sarasota
23. Fisheating Creek near Palmdale
24. St. Lucie Canal at lock near Stuart
25. Caloosahatchee Canal at Ortona lock near Labelle
26. West Palm Beach Canal at West Palm Beach
27. Miami Canal at NW 36th Street, Miami
28. Tamiami Canal-40 mile bend to Monroe
29. Santa Fe River at Worthington Springs
30. Econfina Creek near Bennett
31. Sopchoppy River near Sopchoppy (hydrologic bench-mark station)

Figure 10. NASQAN stations in the State of Florida.

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EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1986 water year that began October 1, 1985, and ended September 30, 1986. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and for surface-water stations where only miscellaneous measurements are made.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention shows which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete number for each station, such as 02326500, which appears just to the left of the station name, includes the two-digit Part number "02" plus the 6 to 13 digit downstream-order number "326500." The part number refers to an area whose boundaries coincide with natural drainage lines; for example, Part "02" is the South Atlantic Slope and eastern Gulf of Mexico basins.

Latitude-Longitude System

The identification numbers for wells and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a unique number and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below.)

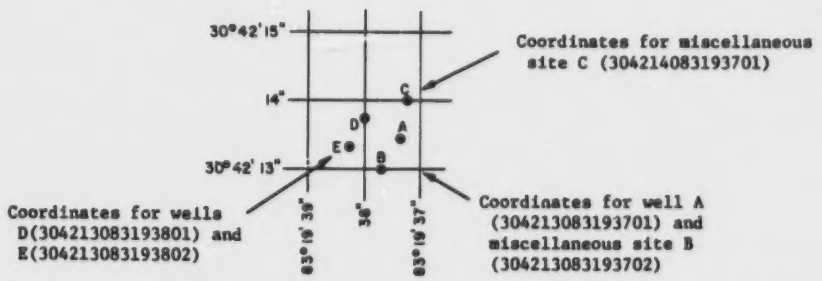

Figure 11.--System for numbering wells and miscellaneous sites (latitude and longtitude)

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Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a recording device through which either instantaneous or mean daily discharges may be computed for any period of time. Complete records of lake or reservoirs, similarly, are those for which stage or content may be computed for any period of time. They may be obtained using a recording device or daily readings. Because daily mean discharges or elevations commonly are published for such stations, they are referred to as "daily stations."

Location of all complete-record stations for which data are given in this report are shown in figures preceding each sub-basin.

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. Records of miscellaneous discharge measurements or of measurements from special studies, such as low-flow seepage studies, may be considered as partial records. The nature of the partial record is indicated by table titles such as "Crest-stage partial records," or "Low-flow partial records."

Data Collection and Computation

The base data collected at gaging stations consist of records of gage heights and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of gage height are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives the fluctuations on a paper tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6.

For stream-gaging stations, rating tables giving the discharge for any gage height are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to define the extremes of discharge, they are made on the basis of indirect measurements of peak discharge; such as slope-area, contracted opening measurements, computations of flow over dams or weirs, step backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharges are computed from the daily figures. If the stage-discharge relation was subjected to change because of occasional or continual change in the physical features of the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by the technician are used in applying the gage-height corrections to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by the same method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from streams, tides, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in determining discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by a rapid change in stage; at these stations the rate of change in stage is used as a factor in determining discharge.

At some stations there is no relation between stage and discharge because of the flat stream gradients and/or tidal fluctuations. Discharge is determined from ratings which are based on a relation between recorded velocity index unit at a fixed point and mean velocity at a fixed measuring section, and a relation between recorded stage and cross-sectional area at the measuring site.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, adjoining good record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes and reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations. Records are published for the water year, which begins on October 1 and ends on September 30.

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and the data table for the current water year. The manuscript provides, under various headings, descriptive information, such as station location; period of record; average discharge; historical extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

Manuscript

LOCATION.--This paragraph reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; the distance and direction from a geographic point of reference.

DRAINAGE AREA.--Drainage areas are delineated and measured using the most accurate topographic maps available, and are updated as necessary.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year.

REVISED RECORDS.--Published records, because of new information, occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will be identified by date in this paragraph of the station description for water-discharge stations. (See next section, "Identifying Estimated Daily Discharge.") The paragraph will begin with this information presented as the first entry. This paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station and other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

AVERAGE DISCHARGE.--The discharge value given is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years of complete record are included in the computation. It is not computed for stations where diversions, storage, or other water-use practices cause the value to be meaningless. If water developments significantly altering flow at a station are put into use after the station has been in operation for a period of years, a new average is computed as soon as 5 water years of record have accumulated following the development.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum stages, discharges or contents. Unless otherwise qualified, the maximum discharge or content is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, or by direct observation of a nonrecording gage. If the maximum stage did not occur on the same day as the maximum discharge or content, it is given separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified, and was determined and is reported in the same manner as the maximum.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--Extremes given here are similar to those for the period of record, except the peak discharge listing may include secondary peaks. For stations meeting certain criteria, all peak discharges and stages occurring during the water year and greater than a selected base discharge are presented under this heading. The peaks greater than the base discharge, excluding the highest one, are referred to as secondary peaks. Peak discharges are not published for canals, ditches, drains, or streams for which the peaks are subject to substantial control by man. The time of occurrence for peaks is expressed in 24-hour local standard time. For example, 12:30 a.m. is 0030, and 1:30 p.m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Data Table

The daily table for stream-gaging stations gives mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN."), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables are identified by listing the dates of the estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records depends primarily on: (1) The stability of the stage- discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true values; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for values less than 1 cubit foot per second; to the nearest tenth between 1.0 and 10 cubic feet per second; to whole numbers between 10 and 1,000 cubic feet per second, and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff, in inches, are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

Information used in the preparation of the records in this publication, such as discharge- measurement notes, gage-height records, temperature measurements, and rating tables is on file in the Tallahassee office of the Florida District. Also, most of the daily mean discharges are in computer-readable form and have been analyzed statistically. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the offices whose addresses are given on the back of the title page of this report.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in seperate tables following the table of discharge measurements at miscellaneous sites.

On-site Measurements and Sample Collection

In obtaining water-quality data, a major concern is assuring that the data obtained represents the quality of the water in its natural state. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the natural water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey.

On-site Measurements and Sample Collection--Continued

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals depends on flow conditions and other factors which must be evaluated by the collector.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

In addition to the records of suspended-sediment discharge, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included for some stations.

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally. All other samples are analyzed in the Geological Survey laboratory in Arvada, Colorado. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Data Presentation

Information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each complete-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

REVISIONS.--If errors in published water-quality records are discovered after publication, appropriate updates are made to the Water-Quality File in the U.S. Geological Survey's computerized data system, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to insure the most recent updates.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT	REMARK
E	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Results based on colony count outside the acceptance range (non-ideal colony count)
L	Biological organism count less than 0.5 percent (organism may be observed rather than counted)
D	Biological organism count equal to or greater than 15 percent (dominant)
&	Biological organism estimated as dominant

Records of Ground-Water Levels

Ground-water level data from a statewide network of observation wells are published herein. The records include data from wells equipped with water-level recorders and data from wells where water levels are measured periodically.

Data Collection and Computation

Measurements of water levels are made in many types of wells under varying conditions, but the methods of measurement are standardized to the extent possible. The equipment and measuring techniques used at each observation well ensure that measurements at each well are of consistent accuracy and reliability.

Tables of water-level data are presented by counties arranged in alphabetical order. The prime identification number for a given well is the 15-digit number that appears in the upper left corner of the table.

Water-level records are obtained from direct measurements with a steel tape, pressure gage, manometer, or from the graph or punched tape of a water-level recorder. The measurements in this report are given in feet above or below National Geodetic Vertical Datum of 1929 or in some tables as feet below land-surface datum. Land-surface datum is a datum plane that is approximately at land surface at each well. The elevation of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is given in each well description.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given to a tenth of a foot or a larger unit.

Data Presentation

Each well record consists of two parts, the manuscript or station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. The comments to follow clarify information presented under the various headings.

Manuscript

WELL NUMBER.--This entry designates the unique well-identification number, based on latitude and longitude, and the local well number or name (or both).

LOCATION.--This paragraph reports the latitude and longitude (given in degrees, minutes, and seconds); a landline location designation; the hydrologic-unit number; and the distance and direction from a geographic point of reference.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well. The aquifer code also may be shown.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, use, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the measurement method used and the measuring point. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum).

DATUM.--The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

Manuscript--Continued

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the U.S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

Data Table

A table of water levels follows the station description for each well. For wells equipped with recorders, only abbreviated tables are published; generally, daily maximums are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that, for most sampling sites, they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes, one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

Methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published with the ground-water-level records for each county. Data for quality of ground water are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. The Remark Codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Florida.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from the offices whose addresses are given on the back of the title page.

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. See also table for converting English units to International System (SI) Units on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multi-celled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C plus or minus 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C plus or minus 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C plus or minus 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, necessary for the decomposition of organic matter by micro-organisms, such as bacteria.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square mile (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and ash mass and represents the actual mass of the living matter. The organic mass is expressed in the same units as for ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Cubic-feet-per-second day (CFS-Day) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of salt water.

Cubic feet per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 um membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Elevation is a value given a gaging station or a ground-water well, for which the elevation of the gage datum has not been determined by leveling from a bench mark. The approximate elevation of the gage was then obtained by barometric observation or from topographic map.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is expressed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per gram (ug/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/I, ug/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentaiton methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay.....	0.00024 - 0.004	Sedimentation
Silt.....	.004 - .062	Sedimentation
Sand.....	.062 - 2.0	Sedimentation or sieve
Gravel.....	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic matter is removed, and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Recurrence interval is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called return period.

Runoff in inches (IN., in.) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow ($7\ Q_{10}$) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

Sodium-adsorption-ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water, per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

Natural substrate refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphytcn collection.

Surface area of a lake is that area outlined on the latest U.S.G.S. topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimetered. All areas shown are those for the stage when the planimetered map was made.

Surficial bed material is the part (0.1 to 0.2 ft) of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 um membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Time-weighted average is computed by multiplying the number of days in the sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the total number of days. A time-weighted average represents the composition of water that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour period.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1986, is called the "1986 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

Weighted average is used in this report to indicate discharge-weighted average. It is computed by multiplying the discharge for a sampling period by the concentrations of individual constituents for the corresponding period and dividing the sum of the products by the sum of the discharges. A discharge-weighted average approximates the composition of water that would be found in a reservoir containing all the water passing a given location during the water year after thorough mixing in the reservoir.

WSP is used as an abbreviaton for "Water-Supply Paper" in reference to previously published reports.

PUBLICATIONS OF TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. WATER TEMPERATURE--INFLUENTIAL FACTORS, FIELD MEASUREMENT, AND DATA PRESENTATION, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. GUIDELINES FOR COLLECTION AND FIELD ANALYSIS OF GROUND-WATER SAMPLES FOR SELECTED UNSTABLE CONSTITUENTS, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. APPLICATION OF SURFACE GEOPHYSICS TO GROUND-WATER INVESTIGATIONS, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. APPLICATION OF BOREHOLE GEOPHYSICS TO WATER-RESOURCES INVESTIGATIONS, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. GENERAL FIELD AND OFFICE PROCEDURES FOR INDIRECT DISCHARGE MEASUREMENTS, by M. A. Benson and Tate Dalrymple: USGS-TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. MEASUREMENT OF PEAK DISCHARGE BY THE SLOPE-AREA METHOD, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. MEASUREMENT OF PEAK DISCHARGE AT CULVERTS BY INDIRECT METHODS, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. MEASUREMENT OF PEAK DISCHARGE AT WIDTH CONTRACTIONS BY INDIRECT METHODS, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. MEASUREMENT OF PEAK DISCHARGE AT DAMS BY INDIRECT METHODS, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. GENERAL PROCEDURE FOR GAGING STREAMS, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. STAGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. DISCHARGE MEASUREMENTS AT GAGING STATIONS, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. MEASUREMENT OF TIME OF TRAVEL AND DISPERSION IN STREAMS BY DYE TRACING, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. DISCHARGE RATINGS AT GAGING STATIONS, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. MEASUREMENT OF DISCHARGE BY MOVING-BOAT METHOD, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. COMPUTATION OF CONTINUOUS RECORDS OF STREAMFLOW, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. USE OF FLUMES IN MEASURING DISCHARGE, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. COMPUTATION OF WATER-SURFACE PROFILES IN OPEN CHANNELS, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. AQUIFER-TEST DESIGN, OBSERVATION, AND DATA ANALYSIS, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. INTRODUCTION TO GROUND-WATER HYDRAULICS, A PROGRAMED TEXT FOR SELF-INSTRUCTION, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

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3-C1. FLUVIAL SEDIMENT CONCEPTS, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. FIELD METHODS FOR MEASUREMENT OF FLUVIAL SEDIMENT, by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. COMPUTATION OF FLUVIAL-SEDIMENT DISCHARGE, by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. SOME STATISTICAL TOOLS IN HYDROLOGY, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. FREQUENCY CURVES, by H. C. Riggs: USGS-TWRI Book 4, Chapter A2. 1968. 15 pages.

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4-B2. STORAGE ANALYSES FOR WATER SUPPLY, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. REGIONAL ANALYSES OF STREAMFLOW CHARACTERISTICS, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. COMPUTATION OF RATE AND VOLUME OF STREAM DEPLETION BY WELLS, by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

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5-C1. LABORATORY THEORY AND METHODS FOR SEDIMENT ANALYSIS, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. FINITE DIFFERENCE MODEL FOR AQUIFER SIMULATION IN TWO DIMENSIONS WITH RESULTS OF NUMERICAL EXPERIMENTS, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. COMPUTER MODEL OF TWO-DIMENSIONAL SOLUTE TRANSPORT AND DISPERSION IN GROUND WATER, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

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8-A1. METHODS OF MEASURING WATER LEVELS IN DEEP WELLS, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-A2. INSTALLATION AND SERVICE MANUAL FOR U.S. GEOLOGICAL SURVEY MANOMETERS, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

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STAGE, DISCHARGE, AND WATER QUALITY OF STREAMS

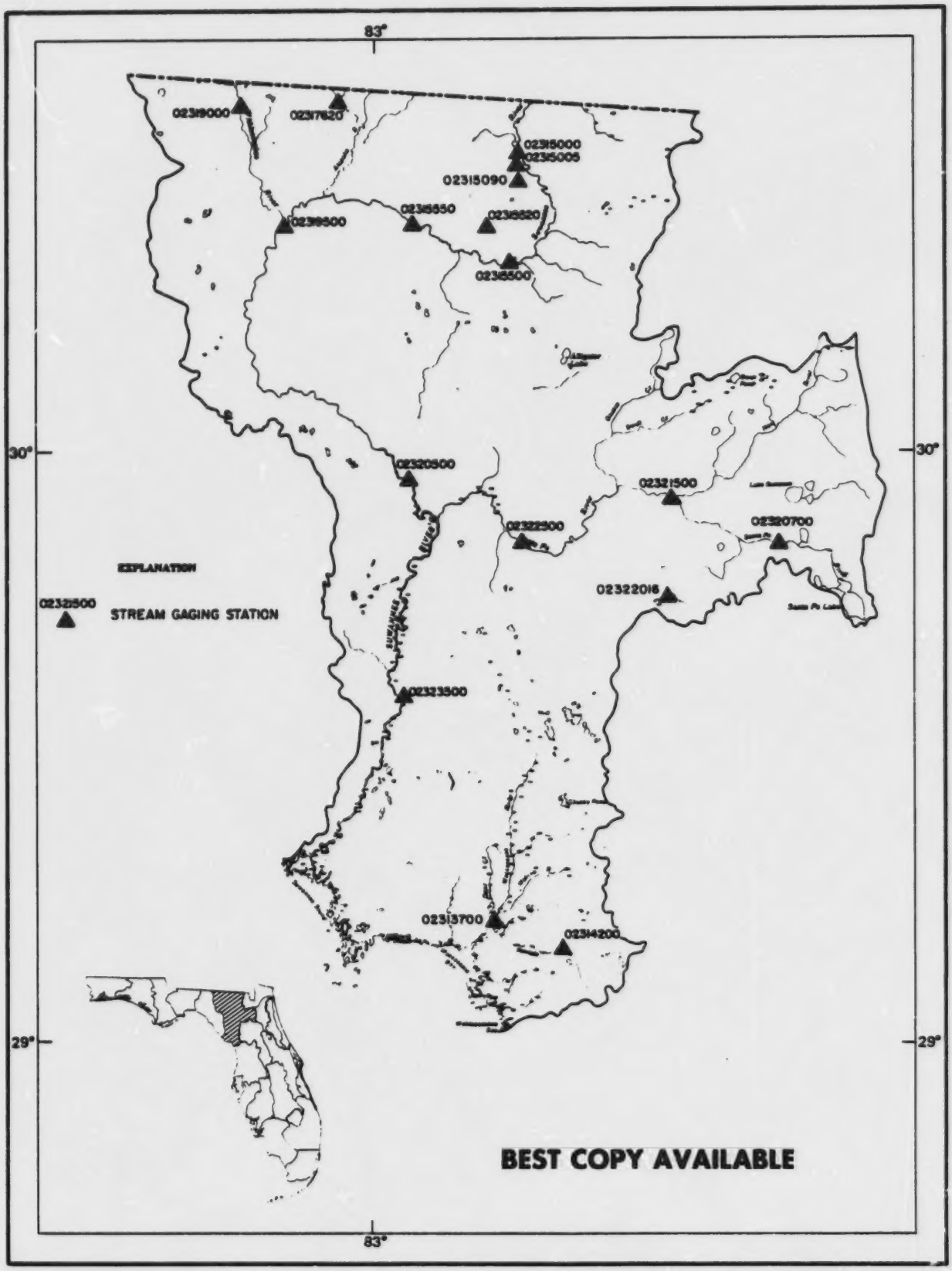

Figure 12. Location of stream gaging stations in the Waccasassa and Suwannee River basins.

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02313700 WACCASASSA RIVER NEAR GULF HAMMOCK, FL

LOCATION.--Lat 29°12'14", long 82°46'09", in SW¼ sec.2, T.15 S., R.15 E., Levy County, Hydrologic Unit 03110101, near right bank at abandoned railroad grade, 0.5 mi upstream from Otter Creek, 3.6 mi upstream from mouth, and 4 mi southwest of Gulf Hammock.

DRAINAGE AREA.--480 mi^2, approximately, including that of Otter Creek.

PERIOD OF RECORD.--March 1963 to September 1978; November 1980 to current year (fragmentary).

REVISED RECORDS.--WSP 2105: 1969. WRD FL-72-1: Drainage area.

GAGE.--Water-stage and water-current meter recorders. Datum of gage is 10.51 ft below National Geodetic Vertical Datum of 1929. Prior to Nov. 24, 1980, water-stage and deflection-meter recorders at same site at datum 10.00 ft higher.

REMARKS.--Estimated daily discharges: June 24 - Aug. 12. Records fair. Flow affected by tide. Discharge computed from continuous velocity record obtained from water-current meter. Records include flow of Otter Creek. Above bankfull stage, discharge measurements are made along abandoned railroad fill and include all flow from about 1.5 mi northwest to 0.8 mi northeast of gaging station.

AVERAGE DISCHARGE.--16 years (water years 1964-78, 86), 226 ft^3/s 226,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,200 ft^3/s Sept. 12, 1964, gage height, 16.96 ft present datum; maximum daily reverse flow 2,310 ft^3/s Aug. 31, 1985, minimum gage height, 7.23 ft Nov. 23, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge 1,690 ft^3/s Aug. 22; maximum gage height 15.75 ft Oct. 31; maximum daily reverse flow 780 ft^3/s Oct. 31; minimum gage height, 7.40 ft Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	183	185	130	193	182	347	177	31	38	93	252	928
2	219	1370	177	160	182	261	144	-19	79	74	255	713
3	210	1080	135	182	139	255	94	123	427	99	187	664
4	170	1130	100	102	65	265	118	29	81	81	162	480
5	207	819	110	297	185	259	148	23	31	72	93	494
6	228	672	121	124	186	253	130	97	-46	382	127	496
7	160	516	81	184	312	281	117	80	-61	123	133	457
8	119	570	13	247	316	314	93	102	-61	106	116	524
9	158	315	118	112	381	188	84	111	-91	73	119	494
10	104	341	78	520	372	218	98	93	-53	55	119	590
11	125	329	67	819	485	219	69	70	-2.1	15	136	1060
12	78	286	59	967	541	188	35	76	-15	143	14	854
13	103	365	12	895	549	92	154	131	31	165	156	736
14	72	228	237	808	471	82	122	153	-43	207	528	567
15	42	216	144	687	536	549	86	175	-90	176	963	453
16	106	195	144	545	441	856	51	124	-63	209	1230	354
17	127	194	134	482	422	1020	126	48	39	244	1230	272
18	107	155	124	421	359	921	51	9.2	82	251	1180	205
19	80	151	154	427	306	736	24	169	112	257	1490	181
20	71	-127	107	449	373	707	-46	21	137	226	36	129
21	107	-86	142	326	343	936	129	204	196	269	1100	92
22	105	604	98	286	331	690	172	150	71	291	1690	80
23	125	226	63	341	374	545	115	94	-40	234	1670	89
24	134	180	148	311	360	521	82	-9.5	-59	210	1540	86
25	122	147	267	235	430	485	112	-19	.00	24	1570	29
26	66	153	70	302	237	396	-68	10	35	185	1320	46
27	41	107	105	333	286	391	29	64	82	207	1140	51
28	-5.7	108	81	232	420	286	8.2	124	30	196	946	69
29	648	157	131	165	---	280	73	153	78	186	1080	42
30	-454	168	137	213	---	228	77	51	59	209	1240	110
31	-780	---	62	191	---	220	---	86	---	227	1140	---
TOTAL	2777.3	10784	3549	11556	9584	12989	2604.2	2553.7	983.90	5289	22962	11345
MEAN	89.6	359	114	373	342	419	86.8	82.4	32.8	171	741	378
MAX	648	1370	267	967	549	1020	177	204	427	382	1690	1060
MIN	-780	-127	12	102	65	82	-68	-19	-91	15	14	29
CFSM	.19	.75	.24	.78	.71	.87	.18	.17	.07	.36	1.54	.79
IN.	.22	.84	.28	.90	.74	1.01	.20	.20	.08	.41	1.78	.88
AC-FT	5510	21390	7040	22920	19010	25760	5170	5070	1950	10490	45550	22500

WTR YR 1986 TOTAL 96977.10 MEAN 266 MAX 1690 MIN -780 CFSM .55 IN 7.52 AC-FT 192400

02314200 TENMILE CREEK AT LEBANON STATION, FL

LOCATION.--Lat 29°09'39", long 82°38'21", in SE¼ sec.24, T.15 S., R.16 E., Levy County, Hydrologic Unit 03110101, near center of span on downstream side of bridge on U.S. Highways 19 and 98, just downstream from North Prong Tenmile Creek, 0.2 mi south of Lebanon Station, 9.4 mi upstream from mouth, and 13 mi northwest of Dunnellon.

DRAINAGE AREA.--26 mi^2, approximately; 34 mi^2, approximately, includes that of Horse Hole Creek.

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is 15.00 ft above National Geodetic Vertical Datum of 1929. Since Feb. 26, 1964, nonrecording gage at Horse Hole Creek. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records poor. Records do not include considerable amount of water diverted naturally above station into Horse Hole Creek basin. Discharge measurements of Horse Hole Creek, drainage area 8.1 mi^2, approximately, are made at bridge on U.S. Highways 19 and 98, 1.9 mi south of Tenmile Creek station.

AVERAGE DISCHARGE.--23 years, 38.3 ft^3/s, 27,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,290 ft^3/s Sept. 11, 1964, gage height, 12.38 ft; no flow for many days in 1964, 1967, 1977, 1981, 1985, 1986.

EXTREMES FOR PERIOD OF RECORD (Horse Hole Creek-02314205).--Maximum discharge measured, 1,270 ft^3/s Sept. 11, 1964, elevation, 26.56 ft above NGVD; creek dry at times each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Jan. 11	0300	648	9.63	July 28	2200	344	8.75
Mar. 15	2000	*693	*9.71	Sept. 11	0300	337	8.85

No flow, June 9, 10.

Discharge measurements in cubic feet per second, of Horsehole Creek near Lebanon Station for the water year 1986 are given in table below.

DATE	TIME	STREAM FLOW INSTANTANEOUS (CFS)	DATE	TIME	STREAM FLOW INSTANTANEOUS (CFS)
Oct. 30...	0845	.096	May 13...	1300	.000
Dec. 17...	1200	.000	July 8...	1100	.000
Apr. 2...	1000	1.83	Sept. 4...	1130	8.07

02314200 TENMILE CREEK AT LEBANON STATION, FL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	110	6.8	23	65	31	19	.31	.16	.44	102	83
2	197	173	6.1	27	57	29	16	.24	.31	.41	71	155
3	201	136	5.2	23	51	26	14	.21	.19	.44	48	108
4	164	119	4.5	21	45	25	12	.18	.18	1.1	34	80
5	132	98	4.2	22	40	32	10	.17	.17	1.7	27	207
6	105	83	4.9	22	40	32	8.5	.18	.11	1.9	22	264
7	84	69	4.3	20	51	30	7.0	.23	.08	4.8	20	249
8	66	56	3.5	23	65	27	5.7	.23	.05	2.6	20	206
9	52	45	3.1	22	100	24	4.7	.19	.02	1.3	22	170
10	41	37	2.7	224	92	22	3.6	.16	.01	.89	22	192
11	34	31	2.5	547	87	19	2.8	.13	.18	.74	16	307
12	29	28	2.3	354	86	17	2.3	.14	.13	.73	17	269
13	24	26	2.3	250	77	16	12	.14	.08	.66	82	251
14	21	23	10	191	68	25	15	.22	.19	.56	155	220
15	17	21	11	154	60	357	12	.45	.23	.49	145	178
16	16	18	8.6	128	52	503	10	.35	.23	.51	173	141
17	18	16	7.3	105	45	346	7.8	.08	.32	.58	128	108
18	16	14	6.3	92	45	248	5.9	.08	.55	.49	119	86
19	14	12	5.6	98	45	190	4.4	.08	.78	.50	99	73
20	13	12	4.8	91	42	152	3.2	.19	.68	.55	163	59
21	12	12	4.3	82	39	130	2.9	.17	.53	.54	165	48
22	11	12	3.6	72	36	106	2.9	.11	.50	.57	110	38
23	10	12	3.3	64	45	89	2.2	.09	3.9	.72	83	31
24	8.8	11	4.1	56	51	77	1.5	.08	4.2	.98	62	26
25	7.6	9.8	7.2	51	46	65	1.2	.06	4.6	1.5	46	23
26	7.4	8.8	6.3	67	39	55	1.0	.05	1.7	3.1	39	22
27	6.9	8.0	5.3	95	34	47	.84	.05	.92	24	81	20
28	6.5	7.4	5.0	91	31	40	.68	.09	.63	168	52	18
29	5.9	8.3	4.7	88	---	33	.55	.09	.57	275	49	17
30	6.2	7.5	4.4	82	---	28	.45	.10	.51	196	72	21
31	14	---	3.9	74	---	23	---	.08	---	150	57	---
TOTAL	1377.3	1223.8	158.1	3259	1534	2844	190.12	4.93	22.71	841.80	2301	3670
MEAN	44.4	40.8	5.10	105	54.8	91.7	6.34	.16	.76	27.2	74.2	122
MAX	201	173	11	547	100	503	19	.45	4.6	275	173	307
MIN	5.9	7.4	2.3	20	31	16	.45	.05	.01	.41	16	17
CFSM	1.71	1.57	.20	4.04	2.11	3.53	.24	.006	.03	1.05	2.85	4.69
IN.	1.97	1.75	.23	4.66	2.19	4.07	.27	.01	.03	1.20	3.29	5.25
AC-FT	2730	2430	314	6460	3040	5640	377	9.8	45	1670	4560	7280

CAL YR 1985 TOTAL 12426.89 MEAN 34.0 MAX 825 MIN .00 CFSM 1.31 IN 17.78 AC-FT 24650
WTR YR 1986 TOTAL 17426.76 MEAN 47.7 MAX 547 MIN .01 CFSM 1.84 IN 24.93 AC-FT 34570

02315000 SUWANNEE RIVER NEAR BENTON, FL

LOCATION.--Lat 30°30'26", long 82°42'59", in NE¼ sec.9, T.1 N., R.16 E., Columbia County, Hydrologic Unit 03110201, near center of channel on downstream side of bridge on State Highway 6, 3.7 mi northwest of Benton, 6.4 mi south of Florida-Georgia State Line, 13.7 mi east of Jasper, and 196 mi, upstream from mouth.

DRAINAGE AREA.--2,090 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year. Miscellaneous discharge measurements for some periods July 1934 to September 1975. Records for December 1931 to June 1934, at site 2.0 mi upstream (at Turner Bridge) not equivalent owing to difference in drainage areas.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Dec. 8, 1931 to June 30, 1934, nonrecording gage at site 2.0 mi upstream at datum unknown.

REMARKS.--Estimated daily discharges: Nov. 18, Dec. 6, 7, Jan. 27, 28, Feb. 2-5, Mar. 27, Apr. 9, 10, 19, 24, May 1, 2, 6-19, June 5 to Sept. 30. Records good, except for estimated periods, which are fair.

AVERAGE DISCHARGE.--11 years, 1,504 ft^3/s, 9.77 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft^3/s Apr. 6, 1984, gage height, 99.90 ft; minimum daily, 5.0 ft^3/s Aug. 9, 1977; minimum gage height, 74.13 ft, Nov. 5, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge measured, 27,700 ft^3/s Apr. 6, 1973, gage height, 102.80 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12,900 ft^3/s Feb. 16, 17; maximum gage height, 97.70 ft Feb. 17; minimum daily, 39 ft^3/s Aug. 4 (estimated).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	626	669	2130	3090	9410	2670	290	74	115	42	390
2	1060	718	728	2150	3020	8900	2540	273	76	105	41	360
3	990	738	824	2170	2960	8440	2360	260	72	110	40	355
4	905	756	840	2200	2950	8160	2200	248	70	115	39	350
5	824	756	829	2640	3120	7770	2080	224	68	110	45	345
6	776	766	819	2870	3510	7250	1920	220	66	115	57	340
7	721	771	817	2930	3780	7060	1760	210	65	100	80	330
8	657	776	814	2980	4060	6830	1690	200	62	95	110	320
9	600	776	804	3200	4620	6270	1570	180	63	90	115	313
10	560	773	794	3540	5290	6100	1410	170	65	85	105	305
11	542	773	763	3970	6550	5620	1260	160	69	95	95	300
12	532	751	753	4300	8980	5160	1170	155	68	85	90	290
13	521	731	1020	4680	11000	4460	1070	150	64	70	110	270
14	507	704	1560	4870	12300	4500	968	145	62	75	140	250
15	480	677	1790	4900	12800	4610	881	142	60	120	160	230
16	463	636	1910	4960	12900	4240	835	127	58	142	180	210
17	451	628	1990	5060	12900	4130	766	125	60	125	200	190
18	425	621	2090	5140	12700	4090	686	134	65	110	190	170
19	427	605	2170	5160	12600	4020	652	127	70	90	185	150
20	392	586	2210	5110	12400	3970	612	117	75	70	180	130
21	367	581	2230	5030	12200	3900	588	119	85	60	250	120
22	364	574	2250	4970	11900	3840	548	114	95	50	300	110
23	353	567	2260	4840	11600	3680	516	105	145	55	400	115
24	342	558	2230	4710	11400	3520	470	102	143	60	420	120
25	335	530	2200	4530	10900	3310	441	99	140	55	400	100
26	328	516	2180	4350	10600	3020	415	96	139	50	370	90
27	324	507	2170	4170	10200	3000	390	90	135	45	330	85
28	320	483	2160	3920	9730	3000	360	89	130	50	300	80
29	342	475	2150	3720	---	2910	337	86	125	55	280	75
30	376	478	2140	3560	---	2990	309	74	120	50	290	70
31	446	---	2140	3330	---	2730	---	77	---	45	330	---
TOTAL	16880	19437	48304	122090	240060	156890	33474	4708	2589	2597	5874	6563
MEAN	545	648	1558	3938	8574	5061	1116	152	86.3	83.8	189	219
MAX	1150	776	2260	5160	12900	9410	2670	290	145	142	420	390
MIN	320	475	669	2130	2950	2730	309	74	58	45	39	70
CFSM	.26	.31	.75	1.88	4.10	2.42	.53	.07	.04	.04	.09	.11
IN.	.30	.35	.86	2.17	4.27	2.79	.60	.08	.05	.05	.10	.12
AC-FT	33480	38550	95810	242200	476200	311200	66400	9340	5140	5150	11650	13020

CAL YR 1985 TOTAL 294777 MEAN 808 MAX 3690 MIN 58 CFSM .39 IN 5.25 AC-FT 584700
WTR YR 1986 TOTAL 659466 MEAN 1807 MAX 12900 MIN 39 CFSM .87 IN 11.74 AC-FT 1308000

02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79.55	77.52	77.70	82.76	85.55	95.87	84.34	75.99	74.75	---	---	---
2	79.20	77.90	77.94	82.83	85.35	95.56	83.98	75.91	74.76	---	---	---
3	78.95	77.98	78.32	82.88	85.20	95.27	83.45	75.84	74.73	---	---	---
4	78.63	78.05	78.38	82.97	85.16	95.09	82.96	75.78	74.72	---	74.59	---
5	78.32	78.05	78.34	84.26	85.63	94.83	82.58	75.66	---	---	---	---
6	78.13	78.09	78.30	84.93	86.70	94.44	82.08	---	---	---	74.74	---
7	77.91	78.11	78.29	85.10	87.42	94.20	81.58	---	---	---	---	---
8	77.65	78.13	78.28	85.24	88.16	93.92	81.34	---	---	---	---	---
9	77.41	78.13	78.24	85.86	89.57	93.20	80.94	---	---	---	---	76.18
10	77.24	78.12	78.20	86.77	91.24	92.91	80.40	---	---	---	---	---
11	77.16	78.12	78.08	87.93	93.61	92.04	79.90	---	74.71	---	---	---
12	77.12	78.03	78.04	88.76	95.61	90.93	79.57	---	---	---	---	---
13	77.07	77.95	79.08	89.74	96.78	89.19	79.22	---	---	---	---	---
14	77.01	77.84	80.95	90.21	97.42	89.29	78.83	---	---	---	---	---
15	76.90	77.73	81.70	90.29	97.65	89.56	78.50	75.19	---	---	---	---
16	76.83	77.56	82.08	90.42	97.69	88.61	78.32	75.10	---	75.31	---	---
17	76.78	77.53	82.34	90.68	97.70	88.33	78.04	75.09	---	---	---	---
18	76.67	77.50	82.64	90.88	97.63	88.24	77.72	75.14	---	---	---	---
19	76.68	77.43	82.88	90.91	97.54	88.04	77.58	75.10	---	---	---	---
20	76.53	77.35	82.99	90.79	97.47	87.92	77.41	75.04	---	---	---	---
21	76.42	77.33	83.05	90.61	97.35	87.73	77.30	75.05	---	---	---	---
22	76.41	77.30	83.12	90.44	97.20	87.58	77.13	75.02	---	---	---	---
23	76.36	77.27	83.16	90.13	97.08	87.16	76.99	74.96	---	---	---	---
24	76.31	77.23	83.06	89.80	96.96	86.73	76.80	74.94	---	---	---	---
25	76.28	77.11	82.98	89.35	96.73	86.16	76.67	74.92	---	---	---	---
26	76.25	77.05	82.92	88.89	96.55	85.36	76.56	74.90	75.29	---	---	---
27	76.23	77.01	82.89	88.43	96.32	85.30	76.45	74.86	---	---	---	---
28	76.21	76.91	82.86	87.80	96.06	85.30	76.32	74.85	---	---	---	---
29	76.31	76.88	82.82	87.25	---	85.06	76.21	74.83	---	---	---	---
30	76.46	76.89	82.80	86.84	---	85.26	76.08	74.75	---	---	---	---
31	76.76	---	82.79	86.21	---	84.52	---	74.77	---	---	---	---
TOTAL	2391.74	2328.10	2505.22	2719.96	2613.33	2783.60	2375.25	---	---	---	---	---
MEAN	77.15	77.60	80.81	87.74	93.33	89.79	79.18	---	---	---	---	---
MAX	79.55	78.13	83.16	90.91	97.70	95.87	84.34	---	---	---	---	---
MIN	76.21	76.88	77.70	82.76	85.16	84.52	76.08	---	---	---	---	---

CAL YR 1985 TOTAL 28403.45 MEAN 77.82 MAX 87.18 MIN 74.67

02315000 SUWANNEE RIVER NEAR BENTON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1956 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)
OCT											
16...	1105	461	60	--	25.0	.80	6.8	.9	.20	.01	.010
DEC											
10...	1350	794	58	5.40	13.0	1.6	9.4	1.0	.20	.00	.010
FEB											
05...	1150	3120	63	4.60	13.5	1.5	7.8	.6	.20	.00	.020
APR											
02...	0830	2430	54	5.30	18.5	1.0	8.0	1.2	.20	.00	.020
JUN											
02...	1605	78	60	4.90	31.0	.50	6.1	.7	.20	.00	.010
AUG											
04...	1145	39	--	--	32.5	--	--	--	--	--	--
06...	0915	57	46	5.20	28.0	1.7	6.9	.6	.20	.01	.020

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)
OCT											
16...	.02	.020	1.1	1.1	1.1	5.0	.090	--	.090	--	--
DEC											
10...	.01	.010	1.2	1.2	1.2	5.4	.090	--	.050	--	--
FEB											
05...	.02	.010	.87	.88	.90	4.0	.060	--	.050	--	--
APR											
02...	.02	.010	.97	.98	1.0	4.4	.050	--	.050	--	--
JUN											
02...	.01	.020	.90	.92	.93	4.1	.190	--	.160	--	--
AUG											
04...	--	--	--	--	--	--	--	--	--	--	--
06...	.03	.030	.97	1.0	1.0	4.6	.240	.64	.210	390	50

DATE	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)
OCT											
16...	--	--	--	--	--	--	--	--	--	--	--
DEC											
10...	--	--	--	--	--	--	--	--	--	--	--
FEB											
05...	--	--	--	--	--	--	--	--	--	--	--
APR											
02...	--	--	--	--	--	--	--	--	--	--	--
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
AUG											
04...	590	570	--	--	--	<1	<1	--	--	--	--
06...	--	--	340	<1	<1	--	--	4	670	50	620

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)	
OCT											
16...	--	--	--	--	--	--	--	--	--	55	
DEC											
10...	--	--	--	--	--	--	--	--	--	51	
FEB											
05...	--	--	--	--	--	--	--	--	--	46	
APR											
02...	--	--	--	--	--	--	--	--	--	45	
JUN											
02...	--	--	--	--	--	--	--	--	--	35	
AUG											
04...	--	<10	--	--	--	--	--	--	<10		--
06...	<5	--	<5	30	10	20	2	30	--	43	

02315005 HUNTER CREEK NEAR BELMONT, FL

LOCATION.--Lat 30°29'08", long 82°42'44", in SE¼ sec.16, T.1 N., R.16 E., Hamilton County, Hydrologic Unit 03110201, on left bank 30 ft downstream from bridge on State Highway 135, 0.8 mi upstream from mouth, and 1.6 mi southeast of Belmont.

DRAINAGE.--Indeterminate, due to progressive strip mining.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1970 (one discharge measurement); August 1971 to January 1979 (discharge measurements only); January to September 1979 (fragmentary); October 1979 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft from topographic map.

REMARKS.--Flow regulated by phosphate mining operation. Missing record not estimated, record fair. Extremes may have been exceeded during periods of missing record.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 515 ft^3/s Feb. 11, 1986; maximum gage height, 12.13 ft Apr. 5, 6, 1984 (backwater from Suwannee River); no flow part of each day Oct. 15, 16, 1980, Aug. 26-31, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 515 ft^3/s Feb. 11, gage height 11.56 ft; minimum daily, .62 ft^3/s Sept. 28, 1986.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	54	9.1	16	11	122	48	36	.90	---	3.4	2.6
2	3.3	62	27	17	10	114	49	37	.82	---	3.5	2.4
3	3.9	42	26	17	9.3	106	46	36	.73	---	3.2	2.1
4	4.1	40	21	52	8.5	114	34	39	.74	---	2.8	1.9
5	4.1	38	17	132	28	118	31	35	.83	---	3.0	2.4
6	3.9	28	15	101	208	116	31	28	.93	---	3.0	2.3
7	3.5	24	12	85	172	113	31	7.7	.79	---	2.8	2.0
8	3.4	19	11	71	205	106	34	8.7	1.0	---	2.3	1.7
9	3.3	16	10	59	312	101	32	10	1.4	---	2.1	1.6
10	3.9	15	9.0	100	426	94	39	9.3	---	---	2.0	1.6
11	6.6	14	7.5	143	500	90	39	8.1	---	---	1.9	1.6
12	5.7	11	6.3	123	462	80	32	7.2	---	---	2.0	1.5
13	5.1	10	35	107	407	83	29	3.6	---	---	5.3	1.4
14	4.8	9.3	67	92	359	103	26	2.7	---	---	5.0	1.3
15	4.2	9.3	60	75	320	111	26	2.0	---	---	4.1	1.3
16	3.8	9.5	50	68	286	108	21	2.2	---	1.3	4.4	1.1
17	3.7	9.2	41	54	261	104	21	2.8	---	1.9	3.9	1.1
18	4.1	9.0	32	44	245	98	40	3.0	---	1.3	3.8	1.1
19	12	9.0	27	37	231	87	61	4.1	---	1.2	3.0	1.0
20	8.2	9.3	22	31	219	85	45	5.6	---	1.2	3.7	.95
21	6.2	11	19	26	203	86	32	2.9	---	1.1	3.8	.91
22	4.8	17	17	22	189	83	35	2.3	---	1.1	3.4	.85
23	3.5	17	16	19	179	74	35	2.0	---	1.3	2.9	.95
24	2.6	15	15	18	169	54	33	1.4	---	1.4	3.0	.82
25	2.3	11	14	18	159	51	33	1.1	---	1.7	2.6	.66
26	5.9	8.0	13	18	146	49	35	1.1	---	3.4	2.6	.67
27	7.0	8.9	11	18	131	47	36	.99	---	5.8	2.4	.64
28	4.1	7.0	10	15	109	48	39	.95	---	6.5	2.2	.62
29	3.9	6.2	9.9	15	---	50	39	.92	---	7.4	3.1	.63
30	4.9	6.2	8.8	14	---	49	33	.88	---	4.9	3.2	.68
31	19	---	8.5	12	---	48	---	.89	---	4.6	2.8	---
TOTAL	159.2	544.9	647.1	1619	5964.8	2692	1065	303.43	---	---	97.2	40.38
MEAN	5.14	18.2	20.9	52.2	213	86.8	35.5	9.79	---	---	3.14	1.35
MAX	19	62	67	143	500	122	61	39	---	---	5.3	2.6
MIN	2.3	6.2	6.3	12	8.5	47	21	.88	---	---	1.9	.62
AC-FT	316	1080	1280	3210	11830	5340	2110	602	---	---	193	80

CAL YR 1985 TOTAL 3818.66 MEAN 10.5 MAX 141 MIN .52 AC-FT 7570

02315005 HUNTER CREEK NEAR BELMONT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)
OCT 16...	0935	3.8	328	6.30	21.5	2.3	6.8	1.1	.90	.19
DEC 10...	1245	9.0	121	6.10	15.0	1.7	8.2	1.2	.70	--
FEB 04...	1525	8.0	109	6.00	14.5	3.1	8.5	1.2	.60	.26
APR 01...	1550	48	448	5.10	21.0	2.2	5.1	4.8	.50	--
JUN 02...	1510	.83	272	6.10	25.0	1.6	6.0	.9	1.3	--
AUG 05...	1550	3.0	368	7.00	25.5	.40	7.6	.6	1.9	.69

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)
OCT 16...	.010	.20	.020	.72	.74	.94	4.2	1.20	3.4
DEC 10...	--	--	--	--	--	--	--	--	--
FEB 04...	.020	.28	.020	.83	.85	1.1	5.0	.950	2.8
APR 01...	--	--	--	--	--	--	--	--	--
JUN 02...	--	--	--	--	--	--	--	--	--
AUG 05...	.020	.71	.060	.54	.60	1.3	5.8	4.00	11

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, SUS-PENDED RECOV. (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE)
OCT 16...	1.10	--	--	--	--	--	--	--	--
DEC 10...	--	--	--	--	--	--	--	--	--
FEB 04...	.900	--	--	--	--	--	--	--	--
APR 01...	--	--	--	--	--	--	--	--	--
JUN 02...	--	--	--	--	-	--	--	--	--
AUG 05...	3.70	90	70	20	1	<1	2	120	80

DATE	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 16...	--	--	--	--	--	--	--	--	26
DEC 10...	--	--	--	--	--	--	--	--	42
FEB 04...	--	--	--	--	--	--	--	--	34
APR 01...	--	--	--	--	--	--	--	--	15
JUN 02...	--	--	--	--	--	--	--	--	11
AUG 05...	40	10	<5	20	0	20	<1	20	12

02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL

LOCATION.--Lat 30°19'32", long 82°44'18", in SW¼ sec.8, T.2 S., R.16 E., Columbia County, Hydrologic Unit 03110201, on downstream side of bridge on U.S. Highway 41, 1.0 mi southeast of White Springs and 171 mi upstream from mouth.

DRAINAGE AREA.--2,430 mi^2 approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1906 to December 1908, February 1927 to current year.

REVISED RECORDS.--WSP 1504: 1906, 1908. WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to July 31, 1932, nonrecording gage at site 1.0 mi downstream at datum 48.54 ft. Aug. 1, 1932 to Oct. 10, 1979, water-stage recorder at datum 48.54 ft. October 11, 1979 to December 1, 1983, non-recording gage at site 2.2 miles downstream at NGVD.

REMARKS.--Estimated daily discharge weekends and holidays during water year and June 14-19. Records fair.

AVERAGE DISCHARGE.--61 years (water years 1907-08, 1928-86), 1,859 ft^3/s, 10.39 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,100 ft^3/s Apr. 10, 1973, gage height, 88.56 ft present datum; minimum, 4.8 ft^3/s Nov. 15, 1931; minimum gage height, 49.59 ft present datum June 24-26, 1955, Nov. 3-8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,400 ft^3/s Feb. 21, gage height, 80.67 ft; minimum daily, 86 ft^3/s July 27, Aug. 4-5; minimum gage height 50.59 ft, Aug. 4-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1560	1160	745	2580	3800	10900	3020	385	114	176	97	570
2	1450	1300	985	2630	3600	10600	2900	361	116	161	92	540
3	1360	1280	1290	2720	3380	10300	2740	340	115	164	87	511
4	1290	1310	1250	3310	3200	10000	2600	321	112	174	86	505
5	1210	1320	1170	4200	3020	9730	2430	303	111	169	86	497
6	1140	1260	1150	4540	4500	9340	2260	282	107	172	93	494
7	1060	1190	1140	4440	5620	8880	2130	253	104	159	115	488
8	968	1140	1120	4330	6100	8340	1990	239	98	147	167	483
9	837	1130	1100	4240	6860	7810	1840	220	97	141	172	474
10	762	1130	1050	4550	7930	7340	1700	205	99	135	164	458
11	775	1120	1020	5970	8540	6890	1560	196	111	141	138	447
12	780	1060	975	6800	8880	6400	1440	191	111	128	135	413
13	760	1010	964	6720	9230	5880	1320	184	102	110	167	398
14	720	988	1540	6560	9820	5730	1220	177	100	115	209	361
15	692	944	2730	6410	10500	5800	1130	177	95	166	245	326
16	666	900	3010	6290	11300	5720	1030	176	90	210	282	292
17	652	812	2880	6210	12300	5540	947	172	95	189	297	261
18	632	812	2820	6130	13300	5390	847	162	100	164	292	229
19	610	788	2830	6080	13800	5220	795	179	105	147	284	207
20	585	775	2840	6040	14200	5070	758	194	115	132	288	187
21	558	782	2830	5930	14300	4990	725	180	130	118	347	169
22	531	809	2800	5790	14100	4800	692	162	150	102	508	159
23	514	821	2770	5640	13800	4570	655	153	220	92	640	167
24	497	806	2750	5490	13300	4380	607	150	214	97	648	167
25	474	780	2700	5290	12800	4180	564	147	210	106	604	142
26	463	745	2650	5020	12200	4000	522	141	205	94	561	128
27	458	705	2610	4700	11700	3830	491	130	209	88	500	122
28	477	686	2630	4440	11300	3670	466	125	196	86	424	114
29	502	680	2600	4310	---	3500	439	120	186	104	424	111
30	555	712	2540	4140	---	3370	411	116	182	111	463	107
31	688	---	2500	4000	---	3200	---	115	---	99	480	---
TOTAL	24226	28955	61989	155500	263380	195370	40229	6256	3999	4197	9095	9527
MEAN	781	965	2000	5016	9406	6302	1341	202	133	135	293	318
MAX	1560	1320	3010	6800	14300	10900	3020	385	220	210	648	570
MIN	458	680	745	2580	3020	3200	411	115	90	86	86	107
CFSM	.32	.40	.82	2.06	3.87	2.59	.55	.08	.06	.06	.12	.13
IN.	.37	.44	.95	2.38	4.03	2.99	.62	.10	.06	.06	.14	.15
AC-FT	48050	57430	123000	308400	522400	387500	79790	12410	7930	8320	18040	18900

CAL YR 1985 TOTAL 390570 MEAN 1070 MAX 4450 MIN 79 CFSM .44 IN 5.98 AC-FT 774700
WTR YR 1986 TOTAL 802723 MEAN 2199 MAX 14300 MIN 86 CFSM .91 IN 12.29 AC-FT 1592000

02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55.90	54.77	53.48	58.66	61.78	78.61	60.17	52.36	50.85	51.26	50.69	52.88
2	55.58	55.15	54.25	58.78	61.27	78.07	59.86	52.26	50.87	51.16	50.65	52.78
3	55.32	55.10	55.13	59.01	60.72	77.39	59.44	52.17	50.86	51.18	50.60	52.68
4	55.12	55.18	55.02	60.55	60.25	76.70	59.06	52.08	50.84	51.23	50.59	52.66
5	54.89	55.22	54.80	62.80	59.80	76.08	58.60	52.00	50.83	51.20	50.59	52.63
6	54.70	55.05	54.74	63.62	63.55	75.20	58.14	51.89	50.80	51.22	50.65	52.61
7	54.48	54.84	54.70	63.38	66.30	74.17	57.80	51 75	50.78	51.14	50.82	52.59
8	54.20	54.70	54.64	63.12	67.44	72.94	57.42	51.67	50.72	51.06	51.17	52.57
9	53.82	54.68	54.57	62.89	69.25	71.72	57.01	51.57	50.71	51.02	51.20	52.54
10	53.55	54.66	54.45	63.66	71.78	70.62	56.62	51.48	50.73	50.98	51.15	52.48
11	53.60	54.65	54.34	67.11	73.18	69.57	56.23	51.43	50.82	51.02	50.98	52.44
12	53.62	54.48	54.22	69.09	73.98	68.42	55.87	51.40	50.82	50.93	50.96	52.31
13	53.54	54.33	54.19	68.90	74.78	67.19	55.54	51.35	50.75	50.80	51.17	52.25
14	53.38	54.26	55.82	68.52	76.13	66.84	55.26	51.31	50.74	50.84	51.40	52.09
15	53.26	54.13	59.04	68.16	77.73	67.02	54.98	51.30	50.70	51.18	51.59	51.94
16	53.13	54.00	59.77	67.87	78.98	66.83	54.70	51.29	50.85	51.38	51.77	51.79
17	53.07	53.90	59.44	67.69	79.75	66.41	54.44	51.26	50.70	51.32	51.84	51.64
18	52.99	53.74	59.28	67.50	80.24	66.04	54.15	51.20	50.74	51.17	51.82	51.48
19	52.92	53.65	59.30	67.38	80.48	65.65	53.98	51.29	50.78	51.06	51.78	51.36
20	52.84	53.60	59.32	67.28	80.62	65.30	53.82	51.38	50.85	50.96	51.80	51.25
21	52.75	53.63	59.30	67.02	80.66	65.10	53.69	51.29	50.96	50.86	52.06	51.13
22	52.66	53.73	59.23	66.67	80.60	64.65	53.54	51.18	51.09	50.74	52.68	51.07
23	52.60	53.77	59.15	66.31	80.50	64.09	53.36	51.12	51.50	50.65	53.12	51.12
24	52.54	53.72	59.08	65.96	80.30	63.63	53.18	51.10	51.47	50.69	53.15	51.12
25	52.46	53.62	58.95	65.47	80.07	63.14	53.04	51.08	51.45	50.76	52.99	50.96
26	52.42	53.48	58.83	64.80	79.78	62.68	52.89	51.04	51.42	50.67	52.85	50.86
27	52.40	53.32	58.73	64.02	79.46	62.27	52.78	50.97	51.44	50.62	52.64	50.82
28	52.47	53.23	58.78	63.39	79.08	61.85	52.69	50.93	51.37	50.60	52.36	50.75
29	52.56	53.20	58.70	63.06	---	61.42	52.58	50.90	51.31	50.75	52.36	50.73
30	52.74	53.35	58.55	62.65	---	61.07	52.47	50.87	51.29	50 80	52.51	50.70
31	53.24	---	58.44	62.23	---	60.85	---	50.86	---	71	52.77	---
TOTAL	1658.75	1625.14	1768.24	2007.55	2058.48	2111.32	1663.31	1593.78	1528.84	.96	1602.71	1554.23
MEAN	53.51	54.17	57.04	64.76	73.52	68.11	55.44	51.41	50.96	50.97	51.70	51.81
MAX	55.90	55.22	59.77	69.09	80.66	78.61	60.17	52.36	51.50	51.38	53.15	52.88
MIN	52.40	53.20	53.48	58.66	59.80	60.85	52.47	50.86	50.65	50.60	50.59	50.70

CAL YR 1985 TOTAL 19754.08 MEAN 54.12 MAX 63.41 MIN 50.59
WTR YR 1986 TOTAL 20752.29 MEAN 56.86 MAX 80.66 MIN 50.59

02315500 SUWANNEE RIVER AT WHITE SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
16...	1435	672	68	5.50	25.0	1.0	6.9	.8	.20
DEC									
11...	1100	1020	52	5.80	13.5	1.1	10.2	.7	.30
FEB									
05...	1420	3000	57	5.10	13.5	1.3	8.9	1.0	.20
APR									
02...	1230	2900	58	4.40	19.5	.70	8.2	1.1	.20
JUN									
03...	0820	119	72	6.00	27.0	.50	6.6	.6	.20
AUG									
04...	1300	90	--	--	30.0	--	--	--	--
06...	1225	93	100	6.70	29.0	.40	6.1	1.3	.30

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT									
16...	.01	.010	.02	.020	1.1	1.1	1.1	5.0	.200
DEC									
11...	.01	.010	.02	.010	.92	.93	.95	4.2	.100
FEB									
05...	.00	.020	.02	.010	.76	.77	.79	3.5	.100
APR									
02...	.00	.020	.02	.010	.99	1.0	1.0	4.5	.210
JUN									
03...	.08	.010	.09	.020	.85	.87	.96	4.2	.280
AUG									
04...	--	--	--	--	--	--	--	--	--
06...	.06	.010	.07	.020	.80	.82	.89	3.9	.480

DATE	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CHRO-MIUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT									
16...	--	.190	--	--	--	--	--	--	53
DEC									
11...	--	.100	--	--	--	--	--	--	51
FEB									
05...	--	.080	--	--	--	--	--	--	46
APR									
02...	.64	.210	--	--	--	--	--	--	45
JUN									
03...	.77	.250	--	--	--	--	--	--	34
AUG									
04...	--	--	280	1	<1	<1	<10	<10	--
06...	1.3	.440	--	--	--	--	--	--	30

02315520 SWIFT CREEK AT FACIL, FL

LOCATION.--Lat 30°22'14", long 82°48'00", in SE¼ sec.27, T.1 S., R.15 E., Hamilton County, Hydrologic Unit 03110201, near right bank on downstream side of bridge on U.S. Highway 41, 0.5 mi northwest of Facil, 2.8 mi upstream from mouth, and 3.0 mi southeast of Genoa.

DRAINAGE AREA.--Indeterminate due to progressive strip mining.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1969 to April 1976 (discharge measurements only); May 1976 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 86.43 ft above National Geodetic Vertical Datum of 1929. Prior to May 20, 1976, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated to some extent since 1965 by Occidential Chemical Company by control structures on Swift Creek, Altmans Bay Canal, and on an unnamed tributary. Possible interchange of water between Swift Creek, Hunter Creek, and Roaring Creek basins due to releases from diked phosphate mining area encompassing part of the three basins. Flow contains some ground water used for phosphate mining.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 1,180 ft^3/s June 27, 1972, gage height, 8.54 ft observed; since May 1976, maximum discharge, 850 ft^3/s Mar. 28, 1984, gage height 7.52 ft; minimum discharge, 1.6 ft^3/s Nov. 12, 1977; minimum gage height, 0.40 ft July 31, 1981, estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 688 ft^3/s Feb. 10, gage height, 6.96 ft; minimum daily, 4.4 ft^3/s, July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	101	34	83	94	87	50	11	16	23	29	58
2	26	80	48	76	94	94	65	11	27	24	26	52
3	27	68	42	73	87	100	55	11	35	25	27	45
4	26	62	37	138	47	125	53	11	32	22	29	43
5	25	58	36	343	70	134	52	11	32	21	31	43
6	24	56	36	223	495	101	49	11	18	15	27	45
7	22	60	36	201	386	84	40	11	37	5.1	26	43
8	21	53	37	178	368	76	35	11	40	4.6	26	43
9	23	47	38	152	396	78	30	11	27	4.4	26	40
10	36	42	38	235	655	91	32	11	30	4.5	26	39
11	40	39	38	340	599	89	22	11	44	6.5	28	42
12	30	37	39	267	496	72	12	11	44	7.3	31	42
13	25	36	92	230	372	67	12	11	43	10	54	43
14	22	34	140	199	350	98	11	25	49	11	50	41
15	22	32	108	179	295	112	11	60	76	11	53	38
16	20	31	99	178	276	117	11	55	82	9.7	54	35
17	18	30	98	166	255	121	11	48	68	11	49	32
18	18	29	102	148	227	121	10	45	57	8.4	50	31
19	18	29	106	137	210	113	10	28	54	8.9	41	34
20	16	31	96	129	198	107	10	26	61	6.4	43	53
21	17	36	88	111	172	106	13	35	51	4.6	45	67
22	17	46	81	107	147	101	11	26	44	7.2	48	59
23	18	39	78	104	144	91	11	21	37	6.9	37	47
24	17	37	75	102	156	88	11	18	39	7.1	32	42
25	17	36	69	101	154	86	11	16	40	18	36	39
26	18	36	63	104	129	80	11	16	27	24	79	37
27	20	40	64	103	119	79	11	16	19	25	83	37
28	22	37	68	98	102	63	12	16	33	25	89	37
29	25	32	70	94	---	57	11	16	30	26	85	37
30	31	31	64	93	---	57	11	16	25	27	74	34
31	63	---	60	96	---	59	---	16	---	33	64	---
TOTAL	745	1325	2080	4788	7093	2852	694	642	1217	442.6	1398	1278
MEAN	24.0	44.2	67.1	154	253	92.0	23.1	20.7	40.6	14.3	45.1	42.6
MAX	63	101	140	343	655	134	65	60	82	33	89	67
MIN	16	29	34	73	47	57	10	11	16	4.4	26	31
CFSM	.37	.68	1.03	2.36	3.87	1.41	.35	.32	.62	.22	.69	.65
IN.	.42	.75	1.18	2.73	4.04	1.62	.40	.37	.69	.25	.80	.73
AC-FT	1480	2630	4130	9500	14070	5660	1380	1270	2410	878	2770	2530

CAL YR 1985 TOTAL 14728.2 MEAN 40.4 MAX 180 MIN 7.3 CFSM .62 IN 8.39 AC-FT 29210
WTR YR 1986 TOTAL 24554.6 MEAN 67.3 MAX 655 MIN 4.4 CFSM 1.03 IN 13.99 AC-FT 48700

02315520 SWIFT CREEK AT FACIL, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
16...	0815	20	671	7.00	24.0	5.0	6.0	2.1	5.0	2.0	.050	2.0
DEC												
09...	1515	38	472	6.60	16.5	2.5	8.8	1.0	4.0	1.6	.100	1.7
FEB												
04...	1400	41	422	6.30	15.5	8.5	7.9	6.0	1.6	2.0	.200	2.2
APR												
01...	1440	50	418	5.70	22.0	5.9	7.1	2.8	3.2	1.4	.080	1.5
JUN												
02...	1355	28	506	6.00	29.0	2.3	5.4	2.8	1.9	2.0	.250	2.2
AUG												
05...	1415	31	463	7.10	27.5	1.0	5.3	4.3	5.3	1.1	.250	1.3

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
OCT											
16...	.060	.92	.98	3.0	13	11.0	34	11.0	--	--	--
DEC											
09...	.020	1.4	1.4	3.1	14	13.0	40	13.0	--	--	--
FEB											
04...	2.90	1.3	4.2	6.4	28	6.90	21	6.90	--	--	--
APR											
01...	.070	1.1	1.2	2.7	12	8.40	24	7.80	--	--	--
JUN											
02...	1.10	.30	1.4	3.6	16	13.0	37	12.0	--	--	--
AUG											
05...	1.60	.40	2.0	3.3	15	8.20	24	7.70	410	30	1

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
16...	--	--	--	--	--	--	--	--	--	--	12
DEC											
09...	--	--	--	--	--	--	--	--	--	--	16
FEB											
04...	--	--	--	--	--	--	--	--	--	--	28
APR											
01...	--	--	--	--	--	--	--	--	--	--	22
JUN											
02...	--	--	--	--	--	--	--	--	--	--	11
AUG											
05...	<1	2	290	50	<5	<5	30	20	5	20	16

02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL

LOCATION.--Lat 30°23'34", long 82°56'00", in NE¼ sec.20, T.1 S., R.14 E., Suwannee County, Hydrologic Unit 03110201, on left bank 0.2 mi upstream from springs at town of Suwannee Springs, 7.5 mi north of Live Oak, and 150 mi upstream from mouth.

DRAINAGE AREA.--2,630 mi^2, approximately, includes part of watershed in Okefenokee Swamp, which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year. Prior to November 1960, six miscellaneous discharge measurements made in 1906, 1951 and 1956. November 1960 to September 1974 (gage heights and discharge measurements only).

REVISED RECORDS.--WSP 2105: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Dec. 13, 1960 to Apr. 26, 1972 and Aug. 21, 1974 to May 8, 1980, auxiliary non-recording gage 0.3 mi downstream from base gage at same datum. Since Oct. 1, 1982 water stage recorder at Suwannee River at Ellaville (02319500), about 23 mi. downstream from base gage, used to determine discharge during backwater conditions.

REMARKS.--Estimated daily discharges: Oct. 1, Feb. 27 to Mar. 11. Records good, except for periods of estimated daily record, which are fair. Flow affected by backwater from Withlacoochee and Alapaha Rivers at times.

AVERAGE DISCHARGE.--12 years (water years 1975-86), 1,887 ft^3/s, 9.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,100 ft^3/s Apr. 12, 1973, gage height, 78.91 ft, from flood marks; minimum, 69 ft^3/s Dec. 10, 11, 1983; minimum gage height, 37.00 ft estimated, Nov. 2, 3, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 12,500 ft^3/s Feb. 27 estimated; maximum gage height, 69.78 ft Feb.21; minimum daily discharge, 216 ft^3/s July 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	1070	63[illegible]	2580	3870	12000	3380	771	321	334	240	690
2	1390	1580	786	2640	3690	11000	3260	738	322	318	234	685
3	1330	1570	1080	2630	3510	10500	3120	705	336	306	227	626
4	1240	1450	1140	2740	3320	10000	2980	672	332	304	244	557
5	1160	1380	1080	4080	3230	9600	2860	652	331	292	235	519
6	1060	1350	1060	4520	4970	9400	2720	628	317	298	229	609
7	970	1280	1050	4430	5880	9000	2580	609	309	288	229	664
8	886	1210	1040	4310	6100	8600	2440	571	318	272	244	671
9	814	1170	1020	4160	6990	8200	2300	545	311	263	274	616
10	764	1140	1010	4370	8050	8000	2170	524	301	256	273	574
11	787	1110	990	5590	8420	7490	2040	503	333	256	263	556
12	749	1090	970	6380	8550	7110	1910	485	339	261	249	536
13	732	1050	1080	6430	8800	6540	1790	474	330	248	292	523
14	691	1020	1850	6260	8890	6350	1690	460	322	240	368	495
15	650	982	2630	6090	9240	6330	1600	460	323	238	536	449
16	612	941	2810	5950	8900	6200	1510	480	364	278	641	405
17	575	902	2630	5850	8140	5910	1430	470	347	307	491	369
18	553	862	2540	5760	9860	5690	1350	460	335	290	460	340
19	533	824	2540	5700	10700	5460	1280	457	344	271	437	317
20	513	802	2530	5650	11200	5230	1240	461	373	258	425	303
21	493	801	2520	5570	11600	5140	1200	459	395	240	440	302
22	479	838	2500	5490	12000	5010	1150	436	422	232	534	296
23	457	857	2500	5400	12100	4760	1090	413	400	234	680	285
24	433	838	2500	5290	12200	4620	1030	395	399	219	751	283
25	412	809	2500	5180	12300	4430	988	382	404	216	721	290
26	398	773	2500	5040	12400	4240	946	368	394	241	708	267
27	396	735	2500	4870	12500	4110	908	358	362	242	708	277
28	392	696	2530	4660	12400	3940	871	346	366	259	682	264
29	388	649	2540	4460	---	3780	840	335	360	258	616	245
30	474	617	2520	4270	---	3650	807	332	347	255	652	236
31	665	---	2510	4070	---	3530	---	325	---	254	652	---
TOTAL	22496	30396	58090	150420	240810	205820	53480	15294	10457	8228	13735	13249
MEAN	726	1013	1874	4852	8600	6639	1783	493	349	265	443	442
MAX	1500	1580	2810	6430	12500	12000	3380	771	422	334	751	690
MIN	388	617	634	2580	3230	3530	807	325	301	216	227	236
CFSM	.28	.38	.71	1.85	3.27	2.52	.68	.19	.13	.10	.17	.17
IN.	.32	.43	.82	2.13	3.41	2.91	.76	.22	.15	.12	.19	.19
AC-FT	44620	60290	115200	298400	477600	408200	106100	30340	20740	16320	27240	26280

CAL YR 1985 TOTAL 381402 MEAN 1045 MAX 4260 MIN 152 CFSM .40 IN 5.39 AC-FT 756500
WTR YR 1986 TOTAL 822475 MEAN 2253 MAX 12500 MIN 216 CFSM .86 IN 11.63 AC-FT 1631000

02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	42.03	40.82	47.40	50.31	---	49.65	41.07	39.15	39.18	38.60	40.68
2	43.44	43.50	41.52	47.54	49.86	---	49.25	40.95	39.16	39.11	38.56	40.67
3	43.24	43.47	42.66	47.51	49.40	---	48.85	40.82	39.22	39.05	38.50	40.48
4	42.98	43.18	42.91	47.74	48.95	---	48.42	40.68	39.21	39.04	38.64	40.22
5	42.69	43.00	42.77	50.56	48.68	---	47.99	40.59	39.20	38.98	38.56	40.06
6	42.39	42.90	42.68	51.54	52.09	---	48.58	40.50	39.12	39.02	38.51	40.39
7	42.08	42.70	42.64	51.47	53.93	---	47.16	40.42	39.08	38.95	38.51	40.59
8	41.79	42.49	42.60	51.31	54.57	---	46.74	40.27	39.12	38.85	38.64	40.61
9	41.54	42.34	42.56	51.06	56.31	---	46.33	40.17	39.08	38.78	38.86	40.41
10	41.36	42.24	42.48	51.52	58.49	---	45.91	40.08	39.03	38.73	38.85	40.24
11	41.44	42.16	42.38	53.80	59.85	58.10	45.50	39.99	39.19	38.75	38.78	40.17
12	41.30	42.06	42.26	55.30	60.89	57.32	45.08	39.92	39.21	38.77	38.68	40.08
13	41.21	41.95	42.61	55.59	61.95	56.31	44.71	39.87	39.18	38.67	38.96	40.03
14	41.06	41.84	45.00	55.45	62.96	55.76	44.38	39.81	39.15	38.61	39.34	39.92
15	40.91	41.70	47.25	55.30	65.27	55.78	44.07	39.88	39.16	38.59	39.99	39.72
16	40.76	41.56	47.95	55.18	66.10	55.69	43.79	39.88	39.32	38.88	40.46	39.53
17	40.62	41.42	47.86	55.09	67.25	55.40	43.50	39.83	39.24	39.06	39.91	39.37
18	40.51	41.28	47.86	55.00	68.35	55.10	43.22	39.78	39.19	38.96	39.81	39.22
19	40.43	41.14	47.96	54.94	69.20	54.76	42.99	39.77	39.23	38.84	39.71	39.10
20	40.35	41.06	48.03	54.85	69.60	54.42	42.82	39.78	39.36	38.74	39.65	39.04
21	40.27	41.06	48.02	54.65	69.78	54.23	42.67	39.78	39.46	38.61	39.70	39.05
22	40.21	41.19	47.99	54.39	69.72	53.93	42.48	39.67	39.57	38.54	40.08	39.00
23	40.12	41.25	47.99	54.10	69.53	53.52	42.26	39.57	39.48	38.56	40.65	38.93
24	40.02	41.21	47.99	53.77	69.25	53.08	42.07	39.49	39.47	38.44	40.91	38.92
25	39.93	41.12	47.93	53.41	68.90	52.62	41.91	39.43	39.50	38.41	40.80	38.97
26	39.87	41.01	47.80	53.08	68.58	52.18	41.74	39.37	39.45	38.61	40.75	38.81
27	39.86	40.91	47.67	52.69	---	51.76	41.60	39.32	39.31	38.62	40.75	38.88
28	39.84	40.81	47.59	52.20	---	51.32	41.47	39.27	39.33	38.75	40.65	38.78
29	39.84	40.71	47.55	51.73	---	50.88	41.34	39.22	39.30	38.74	40.39	38.65
30	40.09	40.65	47.44	51.26	---	50.46	41.21	39.20	39.24	38.72	40.51	38.57
31	40.74	---	47.29	50.78	---	50.06	---	39.17	---	38.72	40.54	---
TOTAL	---	1253.94	1408.06	1630.21	---	---	1337.69	1237.55	1177.71	1202.28	1227.26	1189.09
MEAN	---	41.80	45.42	52.59	---	---	44.59	39.92	39.26	38.78	39.59	39.64
MAX	---	43.50	48.03	55.59	---	---	49.65	41.07	39.57	39.18	40.91	40.68
MIN	---	40.65	40.82	47.40	---	---	41.21	39.17	39.03	38.41	38.50	38.57

02315550 SUWANNEE RIVER AT SUWANNEE SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1956 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT												
15...	1415	650	152	6.10	25.0	.80	6.2	1.2	.40	.12	.010	.13
DEC												
09...	1410	1020	60	5.60	17.0	1.4	9.9	2.1	.40	.08	.010	.09
FEB												
04...	1220	3320	60	5.50	18.0	1.6	9.0	.7	.30	.10	.020	.12
APR												
01...	1220	3380	58	5.50	19.0	1.3	7.6	1.0	.30	.06	.020	.08
JUN												
02...	1240	322	205	5.80	27.0	.50	5.9	.4	.70	.18	.010	.19
AUG												
05...	1245	233	247	7.30	27.0	.40	6.6	.3	1.3	.35	.010	.36

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
OCT											
15...	.010	1.2	1.2	1.3	5.9	.720	2.1	.680	--	--	--
DEC											
09...	.010	1.4	1.4	1.5	6.6	.730	2.1	.700	--	--	--
FEB											
04...	.150	.85	1.0	1.1	5.0	.320	.95	.310	--	--	--
APR											
01...	.010	.91	.92	1.0	4.4	.350	1.0	.330	--	--	--
JUN											
02...	.030	.42	.45	.64	2.8	.760	2.2	.720	--	--	--
AUG											
05...	.050	.43	.48	.84	3.7	2.30	7.1	2.30	140	70	<1

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
15...	--	--	--	--	--	--	--	--	--	--	46
DEC											
09...	--	--	--	--	--	--	--	--	--	--	51
FEB											
04...	--	--	--	--	--	--	--	--	--	--	46
APR											
01...	--	--	--	--	--	--	--	--	--	--	42
JUN											
02...	--	--	--	--	--	--	--	--	--	--	19
AUG											
05...	<1	3	180	160	<5	<5	10	10	2	40	18

02317620 ALAPAHA RIVER NEAR JENNINGS, FL

LOCATION.--Lat 30°35'53", long 83°04'24", in SW¼ sec.1, T.2 N., R.12 E., Hamilton County, Hydrologic Unit 03110202, near left bank on downstream side of bridge on State Highway 150, 150 ft upstream from Southern Railroad bridge, 1,400 ft downstream from Apalahoochee River, 1.5 mi south of Florida-Georgia State line, and 1.6 mi southeast of Jennings, and 20.1 mi upstream from mouth.

DRAINAGE AREA.--1,680 mi^2, approximately.

PERIOD OF RECORD.--July 1976 to September 1984; October 1984 to September 1985 (gage height and peak discharge only); October 1985 to September 1986. Prior to July 28, 1976 (one miscellaneous discharge measurement in 1923, three in 1928 and six made by Suwannee River Water Management District in 1976).

GAGE.--Water-stage recorder. Datum of gage is 58.22 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to August 18, 1928, nonrecording gage at site 150 ft downstream at datum unknown.

AVERAGE DISCHARGE.--9 years, (water years 1977-84, 1986), 1,628 ft^3/s, 13.15 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,800 ft^3/s Feb. 17, 1986, gage height, 32.10 ft; minimum, 31 ft^3/s July 22, 1986, gage height, 3.30 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum measured discharge, 17,900 ft^3/s May 2, 1928, gage height not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 16	1500	4,700	16.29	Feb. 17	2100	*18,800	*32.10
Jan. 13	1900	4,230	15.19				

Minimum discharge, 31 ft^3/s July 22, gage height, 3.30 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	344	1510	3040	1520	5120	1570	146	108	72	82	173
2	117	343	2120	2830	1450	4450	1430	139	91	67	96	191
3	121	318	2240	2650	1380	3880	1280	133	130	73	130	301
4	114	266	2460	2510	1320	3590	1140	127	131	78	121	292
5	111	240	2630	2600	1350	3410	1020	121	122	80	112	255
6	105	238	2730	2620	2300	3090	905	117	119	84	93	228
7	97	200	2730	2680	3420	2780	803	115	102	81	113	209
8	91	177	2690	2670	4640	2490	710	115	89	73	114	186
9	89	164	2600	2560	6090	2240	629	110	79	64	91	173
10	86	157	2470	2750	7720	2030	551	107	82	59	73	183
11	91	150	2340	3610	8900	1870	490	101	129	56	64	206
12	93	146	2240	3940	10000	1720	442	98	144	53	58	198
13	95	142	3030	4190	10600	1610	409	97	136	48	100	184
14	97	141	4330	4160	12100	1840	374	100	153	46	206	170
15	95	142	4480	3960	14900	2300	343	98	188	42	261	156
16	90	138	4670	3710	16000	2650	317	92	159	43	236	139
17	85	134	4600	3500	18100	2830	294	90	150	62	177	129
18	86	128	4380	3350	18100	2740	273	85	120	43	128	122
19	88	123	4050	3240	16000	2590	254	87	125	44	106	118
20	87	120	3720	3100	13900	2550	241	95	168	39	107	111
21	83	136	3560	2950	12200	2700	232	98	165	37	282	105
22	79	172	3640	2780	10800	2700	224	96	149	34	593	104
23	78	207	3810	2580	9730	2580	214	91	142	39	462	106
24	76	276	3970	2400	8820	2390	201	83	115	64	266	107
25	74	278	4060	2260	8120	2200	191	78	97	111	185	96
26	72	280	4130	2160	7330	2040	185	76	86	97	159	91
27	69	381	4200	2060	6530	1920	179	72	90	119	142	87
28	67	564	4210	1950	5820	1840	171	69	75	129	136	84
29	73	810	4080	1840	---	1770	161	68	72	118	123	82
30	89	1100	3730	1730	---	1720	154	64	68	141	124	77
31	205	---	3270	1620	---	1660	---	71	---	108	156	---
TOTAL	2917	8015	104680	88000	239140	79300	15387	3039	3584	2204	5096	4663
MEAN	94.1	267	3377	2839	8541	2558	513	98.0	119	71.1	164	155
MAX	205	1100	4670	4190	18100	5120	1570	146	188	141	593	301
MIN	67	120	1510	1620	1320	1610	154	64	68	34	58	77
CFSM	.06	.16	2.01	1.69	5.08	1.52	.31	.06	.07	.04	.10	.09
IN.	.06	.18	2.32	1.95	5.30	1.76	.34	.07	.08	.05	.11	.10
AC-FT	5790	15900	207600	174500	474300	157300	30520	6030	7110	4370	10110	9250

WTR YR 1986 TOTAL 556025 MEAN 1523 MAX 18100 MIN 34 CFSM .91 IN 12.31 AC-FT 1103000

02317620 ALAPAHA RIVER NEAR JENNINGS, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.87	4.86	8.26	12.33	8.34	17.24	8.48	4.06	3.83	3.60	3.67	4.18
2	3.89	4.86	9.87	11.81	8.14	15.69	8.07	4.02	3.72	3.57	3.76	4.26
3	3.91	4.77	10.20	11.32	7.94	14.38	7.63	3.99	3.97	3.61	3.98	4.71
4	3.87	4.57	10.80	10.93	7.75	13.68	7.21	3.95	3.97	3.64	3.92	4.67
5	3.85	4.47	11.28	11.17	7.84	13.25	6.86	3.91	3.92	3.66	3.86	4.53
6	3.81	4.46	11.52	11.23	10.45	12.46	6.56	3.89	3.90	3.68	3.74	4.42
7	3.76	4.30	11.54	11.40	13.25	11.68	6.28	3.87	3.79	3.66	3.87	4.34
8	3.72	4.20	11.43	11.37	16.14	10.94	6.02	3.88	3.71	3.61	3.88	4.24
9	3.70	4.14	11.18	11.09	19.37	10.29	5.79	3.84	3.64	3.55	3.73	4.18
10	3.68	4.11	10.83	11.57	22.83	9.74	5.55	3.82	3.66	3.51	3.61	4.23
11	3.72	4.07	10.46	13.73	25.04	9.30	5.36	3.78	3.96	3.49	3.54	4.33
12	3.73	4.06	10.21	14.50	26.49	8.89	5.20	3.77	4.04	3.46	3.50	4.29
13	3.74	4.04	12.22	15.09	27.08	8.57	5.09	3.76	4.01	3.43	3.78	4.23
14	3.76	4.03	15.43	15.03	28.46	9.23	4.97	3.78	4.06	3.42	4.32	4.16
15	3.75	4.03	15.76	14.56	30.34	10.46	4.86	3.76	4.24	3.39	4.55	4.10
16	3.71	4.01	16.20	13.97	30.96	11.36	4.77	3.72	4.12	3.39	4.45	4.03
17	3.68	3.99	16.05	13.47	31.83	11.81	4.68	3.71	4.07	3.53	4.20	3.98
18	3.69	3.96	15.55	13.09	31.84	11.59	4.60	3.68	3.91	3.40	3.96	3.94
19	3.70	3.92	14.78	12.82	30.92	11.21	4.52	3.69	3.93	3.40	3.83	3.91
20	3.69	3.91	14.00	12.50	29.71	11.11	4.47	3.75	4.16	3.37	3.83	3.87
21	3.66	4.00	13.62	12.12	28.51	11.48	4.43	3.76	4.15	3.35	4.59	3.83
22	3.64	4.18	13.80	11.68	27.34	11.49	4.40	3.75	4.07	3.33	5.68	3.82
23	3.63	4.32	14.21	11.18	26.16	11.17	4.36	3.72	4.04	3.37	5.27	3.84
24	3.62	4.61	14.58	10.72	24.96	10.68	4.31	3.66	3.89	3.55	4.57	3.84
25	3.60	4.62	14.81	10.33	23.64	10.19	4.26	3.63	3.77	3.86	4.23	3.78
26	3.59	4.62	14.95	10.07	22.02	9.76	4.24	3.62	3.70	3.77	4.12	3.74
27	3.57	4.99	15.11	9.82	20.32	9.44	4.21	3.59	3.72	3.91	4.04	3.71
28	3.56	5.59	15.16	9.52	18.79	9.21	4.17	3.57	3.62	3.97	4.02	3.69
29	3.60	6.30	14.84	9.23	---	9.03	4.13	3.57	3.60	3.90	3.94	3.68
30	3.70	7.11	14.01	8.91	---	8.88	4.09	3.54	3.58	4.02	3.95	3.64
31	4.32	---	12.90	8.60	---	8.72	---	3.59	---	3.84	4.10	---
TOTAL	115.72	135.11	405.56	365.16	606.46	342.93	159.57	116.63	116.75	111.24	126.49	122.17
MEAN	3.73	4.50	13.08	11.78	21.66	11.06	5.32	3.76	3.89	3.59	4.08	4.07
MAX	4.32	7.11	16.20	15.09	31.84	17.24	8.48	4.06	4.24	4.02	5.68	4.71
MIN	3.56	3.91	8.26	8.60	7.75	8.57	4.09	3.54	3.58	3.33	3.50	3.64

WTR YR 1986 TOTAL 2723.79 MEAN 7.46 MAX 31.84 MIN 3.33

02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL

LOCATION.--Lat 30°35'43", long 83°15'35", in NW¼ sec.7, T.2 N., R.11 E., Madison County, Hydrologic Unit 03110203, on right bank 30 ft downstream from bridge, 0.1 mi downstream from small tributary, 0.3 mi west of Bellville, 5.6 mi east of Pinetta, and 22 mi upstream from mouth.

DRAINAGE AREA.--2,120 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Monthly discharge only for October and November 1931, published in WSP 1304.

REVISED RECORDS.--WSP 972: 1941-42. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 47.21 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Oct. 11, 1931 to Dec. 3, 1941, nonrecording gage at same site and datum. Dec. 3, 1941 to Aug. 2, 1972, water-stage recorder at same site and datum. Aug. 2, 1972 to Apr. 22, 1986, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Apr. 2. Records fair.

AVERAGE DISCHARGE.--55 years, 1,688 ft^3/s, 10.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 79,400 ft^3/s Apr. 5, 1948, gage height, 38.64 ft from flood marks; minimum, 70 ft^3/s Aug. 23, 1955, gage height, 6.27 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1928 reached a stage of 36.75 ft from floodmarks, discharge, 53,600 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 47,600 ft^3/s Feb. 15, gage height, 38.20 ft from floodmarks; minimum daily, 162 ft^3/s July 15, gage height, 6.64 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	258	394	4330	2210	1960	5400	1980	340	229	250	210	1210
2	264	586	4650	2450	1880	5150	1770	334	277	241	217	1270
3	255	793	4590	2650	1820	4450	1530	325	286	234	229	1340
4	243	1040	4250	2840	1760	3920	1440	315	272	230	253	1400
5	243	1190	3800	3140	1720	3410	1320	309	247	230	254	1230
6	264	1220	3450	3390	2160	3410	1210	305	241	218	256	1070
7	282	1140	3320	3660	3330	3930	1120	302	235	200	244	926
8	288	1030	3290	3850	4330	3670	1060	299	230	197	237	758
9	285	856	3210	3960	5810	3490	884	292	226	190	233	658
10	282	700	2950	4150	8260	3300	821	283	228	185	221	580
11	279	586	2690	4320	12200	3190	744	280	240	181	199	546
12	273	518	2320	4540	18300	3080	694	282	241	176	201	546
13	249	478	2470	4820	31200	2970	616	278	250	170	262	556
14	240	454	3440	5100	45100	2890	592	270	254	164	402	526
15	234	422	4250	5580	47100	2960	562	264	262	162	431	454
16	237	398	5450	6030	43500	3490	506	261	240	166	823	402
17	219	384	6470	6300	36700	3900	506	257	236	205	1310	360
18	210	366	6850	6430	30800	4270	490	255	223	221	1430	360
19	210	354	7240	6250	25700	4590	470	256	225	210	1400	348
20	204	342	7100	5810	19300	4780	430	266	236	191	1300	339
21	204	378	6900	5170	15100	4810	442	273	264	181	1210	306
22	207	458	6710	4350	11900	4820	413	273	262	176	1280	288
23	204	538	6440	3560	9550	4550	399	264	273	183	1170	276
24	204	670	5880	2990	8070	3830	386	255	280	273	1010	261
25	204	898	5190	2670	7020	3950	381	249	315	257	907	246
26	204	1250	4170	2480	6110	3050	377	245	344	231	819	240
27	201	1790	3170	2320	5840	2890	370	242	328	234	704	225
28	201	2490	2690	2200	5680	2730	362	238	302	224	581	207
29	264	3260	2410	2130	---	2510	354	233	276	214	535	201
30	270	3830	2250	2030	---	2350	347	231	254	205	665	201
31	318	---	2140	2000	---	2120	---	231	---	188	967	---
TOTAL	7500	28813	134080	119380	412200	113860	22576	8507	7776	6387	19960	17330
MEAN	242	960	4325	3851	14720	3673	753	274	259	206	644	578
MAX	318	3830	7240	6430	47100	5400	1980	340	344	273	1430	1400
MIN	201	342	2140	2000	1720	2120	347	231	223	162	199	201
CFSM	.11	.45	2.04	1.82	6.94	1.73	.36	.13	.12	.10	.30	.27
IN.	.13	.51	2.35	2.09	7.23	2.00	.40	.15	.14	.11	.35	.30
AC-FT	14880	57150	265900	236800	817600	225800	44780	16870	15420	12670	39590	34370

CAL YR 1985 TOTAL 339292 MEAN 930 MAX 7240 MIN 123 CFSM .44 IN 5.95 AC-FT 673000
WTR YR 1986 TOTAL 898369 MEAN 2461 MAX 47100 MIN 162 CFSM 1.16 IN 15.76 AC-FT 1782000

02319000 WITHLACOOCHEE RIVER NEAR PINETTA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 15...	1140	211	279	6.20	23.0	1.6	5.1	1.3	.20	.26	.010	.27
DEC 09...	1205	3190	80	6.20	16.5	5.1	8.4	.2	.30	.06	.010	.07
FEB 04...	0955	1760	127	6.40	14.5	4.6	9.4	.9	.15	.30	.010	.31
APR 01...	1045	1910	121	5.40	19.0	6.2	6.1	1.3	.20	.24	.010	.25
JUN 02...	0935	276	368	5.70	25.0	2.3	4.2	1.1	.30	.16	.020	.18
AUG 05...	1025	249	298	7.60	25.0	1.4	5.8	2.8	.40	.04	.020	.06

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)
OCT 15...	.040	.00	.04	.31	1.4	.220	.64	.210	--	--	--	--
DEC 09...	.020	1.2	1.2	1.3	5.6	.130	--	.100	--	--	--	--
FEB 04...	.030	.49	.52	.83	3.7	.080	--	.080	--	--	--	--
APR 01...	.030	.85	.88	1.1	5.0	.140	--	.110	--	--	--	--
JUN 02...	.080	.45	.53	.71	3.1	.180	--	.180	--	--	--	--
AUG 05...	.050	1.5	1.5	1.6	6.9	.350	.89	.290	260	170	1	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 15...	--	--	--	--	--	--	--	--	--	--	14
DEC 09...	--	--	--	--	--	--	--	--	--	--	33
FEB 04...	--	--	--	--	--	--	--	--	--	--	13
APR 01...	--	--	--	--	--	--	--	--	--	--	17
JUN 02...	--	--	--	--	--	--	--	--	--	--	18
AUG 05...	3	250	100	<5	<5	50	30	<.10	1	70	19

02319500 SUWANNEE RIVER AT ELLAVILLE, FL

LOCATION.--Lat 30°23'04", long 83°10'19", in NE¼ sec.24, T.1 S., R.11 E., Suwannee County, Hydrologic Unit 03110205, on left bank at Ellaville, 100 ft upstream from Seaboard Air Line Railroad bridge, 200 ft downstream from Withlacoochee River, 900 ft upstream from bridge on U.S. Highway 90, and 127 mi upstream from mouth.

DRAINAGE AREA.--6,970 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

PERIOD OF RECORD.--January 1927 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 27.22 ft above National Geodetic Vertical Datum of 1929. Prior to June 20, 1932, nonrecording gage at same site and datum. Nov. 8, 1955 to Sept. 30, 1970, nonrecording gage 1.1 mi downstream from base gage at datum 2.67 ft lower, used as supplementary gage when flow was less than 4,800 ft^3/s.

REMARKS.--Records good. Since Nov. 7, 1953, slight regulation at low water caused by diversions above control 0.7 mi downstream from gage by a steam-electric powerplant for cooling of condensers. Total diverted flow is returned to river below control. Records include flow of large spring on left bank about 200 ft downstream; spring flow may reverse during high stages.

AVERAGE DISCHARGE.--59 years, 6,538 ft^3/s, 12.74 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 95,300 ft^3/s Apr. 7,8, 1948, gage height, 40.88 ft, from floodmarks; minimum, 882 ft^3/s July 17, 1955; minimum gage height, 1.56 ft Dec. 1, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 54,400 ft^3/s Feb. 19, gage height, 34.57 ft; minimum, 1,730 ft^3/s Sept. 30, gage height, 2.34 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3890	2780	5470	9670	10400	28000	11400	3680	2470	2210	2070	2950
2	3750	3100	6170	9580	10100	27100	11000	3590	2460	2170	2050	3030
3	3620	3360	6750	9560	9770	26200	10500	3510	2500	2130	1890	3110
4	3500	3500	7050	9570	9450	25200	10100	3430	2510	2100	1890	3140
5	3420	3600	7140	9950	9220	24200	9640	3370	2470	2090	1900	3080
6	3390	3650	7110	10500	9830	23200	9220	3310	2380	2070	1860	3000
7	3310	3640	7090	10800	11200	22200	8830	3270	2340	2060	1820	2960
8	3240	3560	7130	11000	12500	21200	8450	3220	2350	2020	1820	2890
9	3180	3450	7130	11200	14200	20200	8060	3160	2300	2000	1830	2860
10	3120	3350	7050	11400	16600	19200	7660	3100	2270	1970	1830	2860
11	3080	3270	6850	12000	19300	18300	7290	3060	2310	1940	1840	2810
12	3040	3190	6600	12900	21800	17500	6950	3030	2310	1930	1900	2790
13	2880	3130	6540	13600	24000	16700	6630	3000	2360	1910	2020	2780
14	2800	3080	7440	14100	27700	16100	6330	2960	2500	1890	2210	2750
15	2760	3020	8730	14500	33700	16000	6070	2920	2510	1870	2400	2680
16	2710	2980	9850	14800	43500	16200	5830	2910	2330	1870	2670	2570
17	2650	2930	10800	15100	49400	16400	5590	2890	2320	1920	2880	2480
18	2610	2890	11500	15300	53000	16400	5370	2870	2290	1940	2980	2360
19	2580	2840	11900	15400	54200	16500	5170	2850	2270	1920	2930	2250
20	2550	2810	12100	15300	52800	16400	5010	2840	2280	1910	2880	2280
21	2520	2810	12200	15100	50000	16300	4890	2820	2330	1870	2840	2330
22	2480	2840	12200	14700	47100	16200	4710	2800	2360	1820	2920	2280
23	2450	2860	12200	14200	43900	15900	4540	2770	2340	1860	3040	2250
24	2410	2930	12300	13600	40400	15500	4400	2730	2330	1920	3040	2210
25	2380	3040	12100	13200	36800	14900	4280	2700	2330	1860	2990	2180
26	2340	3170	11600	12800	33300	14300	4170	2680	2350	1850	2930	2070
27	2320	3380	11100	12300	30500	13800	4060	2640	2330	1900	2870	1910
28	2410	3750	10700	11900	29000	13400	3960	2550	2300	1870	2800	1900
29	2480	4270	10500	11500	---	12900	3860	2520	2280	1900	2720	1820
30	2520	4820	10200	11100	---	12400	3760	2500	2240	1990	2690	1750
31	2600	---	9900	10800	---	11900	---	2490	---	2090	2790	---
TOTAL	88990	98010	285400	387430	803670	560700	197730	92170	70720	60850	75300	76330
MEAN	2871	3267	9206	12500	28700	18090	6591	2973	2357	1963	2429	2544
MAX	3890	4820	12300	15400	54200	28000	11400	3680	2510	2210	3040	3140
MIN	2320	2780	5470	9560	9220	11900	3760	2490	2240	1820	1820	1750
CFSM	.41	.47	1.32	1.79	4.12	2.60	.95	.43	.34	.28	.35	.37
IN.	.47	.52	1.52	2.07	4.29	2.99	1.06	.49	.38	.32	.40	.41
AC-FT	176500	194400	566100	768500	1594000	1112000	392200	182800	140300	120700	149400	151400

CAL YR 1985	TOTAL	1342920	MEAN	3679	MAX	12300	MIN	1190	CFSM	.53	IN 7.17	AC-FT 2664000
WTR YR 1986	TOTAL	2797300	MEAN	7664	MAX	54200	MIN	1750	CFSM	1.10	IN 14.93	AC-FT 5548000

02319500 SUWANNEE RIVER AT ELLAVILLE, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.46	3.26	6.12	10.37	11.11	27.18	12.13	4.24	2.94	2.72	2.61	3.45
2	4.31	3.62	6.86	10.28	10.78	26.39	11.69	4.15	2.93	2.69	2.60	3.54
3	4.18	3.90	7.45	10.26	10.47	25.51	11.24	4.07	2.96	2.66	2.48	3.63
4	4.05	4.05	7.75	10.27	10.15	24.60	10.78	3.98	2.97	2.64	2.48	3.66
5	3.97	4.16	7.84	10.66	9.92	23.70	10.34	3.91	2.94	2.63	2.48	3.59
6	3.94	4.22	7.81	11.19	10.52	22.82	9.92	3.85	2.86	2.61	2.45	3.51
7	3.85	4.20	7.79	11.54	11.89	21.92	9.53	3.80	2.83	2.60	2.41	3.46
8	3.77	4.11	7.83	11.74	13.12	20.99	9.15	3.75	2.84	2.58	2.41	3.38
9	3.70	4.00	7.83	11.87	14.60	20.06	8.76	3.68	2.80	2.56	2.42	3.35
10	3.64	3.89	7.75	12.07	16.78	19.19	8.36	3.62	2.77	2.53	2.42	3.35
11	3.59	3.80	7.55	12.65	19.30	18.40	7.99	3.57	2.80	2.52	2.43	3.30
12	3.55	3.72	7.30	13.48	21.56	17.63	7.65	3.54	2.80	2.51	2.48	3.28
13	3.37	3.65	7.24	14.12	23.50	16.88	7.33	3.50	2.84	2.49	2.57	3.27
14	3.29	3.59	8.14	14.51	25.97	16.35	7.03	3.46	2.97	2.47	2.72	3.23
15	3.24	3.53	9.43	14.88	29.52	16.29	6.76	3.42	2.97	2.45	2.88	3.15
16	3.19	3.49	10.55	15.20	32.12	16.48	6.50	3.41	2.82	2.46	3.14	3.03
17	3.12	3.43	11.50	15.45	33.61	16.61	6.26	3.38	2.81	2.50	3.37	2.94
18	3.08	3.38	12.16	15.62	34.33	16.67	6.02	3.36	2.79	2.51	3.49	2.85
19	3.04	3.33	12.57	15.71	34.54	16.69	5.81	3.34	2.77	2.50	3.43	2.75
20	3.01	3.30	12.76	15.65	34.30	16.64	5.64	3.33	2.78	2.49	3.37	2.78
21	2.98	3.30	12.80	15.46	33.76	16.56	5.52	3.31	2.82	2.46	3.33	2.82
22	2.95	3.33	12.82	15.11	33.04	16.42	5.32	3.29	2.84	2.42	3.42	2.78
23	2.92	3.35	12.87	14.65	32.23	16.17	5.15	3.25	2.83	2.45	3.55	2.75
24	2.89	3.43	12.87	14.13	31.35	15.78	5.00	3.21	2.82	2.50	3.55	2.72
25	2.86	3.55	12.70	13.69	30.45	15.27	4.87	3.18	2.82	2.45	3.50	2.70
26	2.83	3.70	12.30	13.32	29.57	14.76	4.76	3.15	2.84	2.44	3.43	2.61
27	2.81	3.92	11.83	12.93	28.75	14.30	4.64	3.11	2.82	2.49	3.36	2.49
28	2.88	4.31	11.44	12.54	27.96	13.87	4.53	3.01	2.79	2.46	3.29	2.48
29	2.95	4.86	11.16	12.21	---	13.45	4.43	2.98	2.78	2.48	3.20	2.41
30	2.98	5.44	10.88	11.83	---	13.02	4.33	2.96	2.74	2.56	3.16	2.35
31	3.06	---	10.60	11.45	---	12.58	---	2.96	---	2.63	3.28	---
TOTAL	104.46	113.82	306.50	404.84	655.20	563.18	217.44	107.77	85.29	78.46	91.71	91.61
MEAN	3.37	3.79	9.89	13.06	23.40	18.17	7.25	3.48	2.84	2.53	2.96	3.05
MAX	4.46	5.44	12.87	15.71	34.54	27.18	12.13	4.24	2.97	2.72	3.55	3.66
MIN	2.81	3.26	6.12	10.26	9.92	12.58	4.33	2.96	2.74	2.42	2.41	2.35

WTR YR 1986 TOTAL 2820.28 MEAN 7.73 MAX 34.54 MIN 2.35

02320500 SUWANNEE RIVER AT BRANFORD, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°57'20", long 82°55'40", in NE¼ sec.20, T.6 S., R.14 E., Suwannee County, Hydrologic Unit 03110205, near left bank on upstream side of bridge on U.S. Highway 27 at Branford, 10.2 mi upstream from Santa Fe River and 75 mi upstream from mouth.

DRAINAGE AREA.--7,880 mi^2, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1931 to current year.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is 4.81 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges during year. Records good.

AVERAGE DISCHARGE.--55 years, 7,017 ft^3/s, 12.09 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 83,900 ft^3/s Apr. 11, 1948, gage height, 34.07 ft; minimum, 1,530 ft^3/s July 1, 2, 1955; minimum gage height, 1.97 ft observed, Jan. 10, 11, 14, 17, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of August 1928 reached a stage of 32.0 ft from floodmark; discharge, 65,000 ft^3/s computed on basis of measured crest flow at Ellaville (station 02319500).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,600 ft^3/s Feb. 23, gage height, 28.26 ft; minimum daily, 3,040 ft^3/s Aug. 12, gage height, 5.03 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6480	4340	5490	10400	12200	33000	14600	6280	4160	3620	3120	3760
2	6330	4440	5890	10200	11900	31700	14100	6160	4120	3590	3080	3870
3	6130	4630	6260	10100	11600	30500	13700	6050	4100	3580	3160	3970
4	5990	4970	6600	10100	11400	29600	13200	5910	4100	3530	3110	4030
5	5890	5080	6910	10200	11100	28800	12800	5800	4070	3480	3120	4060
6	5700	5120	7060	10300	11100	27900	12400	5700	4030	3490	3120	4050
7	5550	5230	7140	10600	11400	27000	12000	5650	3990	3470	3110	4010
8	5430	5310	7210	10800	11900	26000	11600	5550	3950	3430	3080	4010
9	5320	5250	7300	10900	12700	24900	11300	5460	3920	3410	3070	3940
10	5220	5180	7340	11200	13700	24000	10900	5360	3880	3380	3070	3910
11	5120	5080	7360	11400	15200	23100	10500	5260	3860	3360	3050	3900
12	5040	4960	7340	11800	16900	22200	10200	5180	3870	3340	3040	3850
13	4970	4880	7330	12300	18600	21300	9880	5120	3870	3320	3070	3830
14	4870	4790	7300	12800	20200	20600	9570	5050	3860	3290	3190	3810
15	4790	4690	7560	13200	22000	19900	9270	4980	3860	3260	3210	3770
16	4700	4620	8180	13500	24000	19500	8970	4900	3840	3230	3260	3710
17	4630	4540	8880	13900	26100	19300	8730	4850	3820	3220	3430	3660
18	4520	4440	9430	14000	28500	19100	8470	4770	3810	3230	3600	3610
19	4430	4350	9970	14500	31000	19000	8220	4740	3850	3240	3710	3530
20	4360	4290	10400	14700	34000	18700	8000	4770	3820	3210	3790	3490
21	4350	4270	10700	14800	36100	18800	7850	4750	3800	3190	3800	3410
22	4280	4360	10900	14800	37700	18700	7640	4660	3790	3180	3760	3380
23	4220	4310	11000	14700	38500	18500	7480	4600	3800	3230	3780	3340
24	4150	4240	11200	14500	38400	18200	7280	4550	3790	3140	3820	3320
25	4080	4270	11300	14200	37800	17900	7110	4490	3760	3140	3870	3300
26	4030	4310	11300	14000	36600	17500	6970	4440	3740	3160	3850	3270
27	3990	4410	11200	13700	35500	17000	6740	4380	3780	3190	3810	3240
28	3970	4550	11000	13400	34200	16500	6680	4340	3710	3190	3780	3210
29	3970	4780	10800	13100	---	16100	6550	4290	3680	3180	3780	3190
30	3940	5080	10600	12800	---	15600	6410	4220	3650	3140	3750	3150
31	4030	---	10500	12500	---	15000	---	4180	---	3090	3690	---
TOTAL	150480	140770	271450	389400	650300	675900	289120	156440	116280	102510	106080	109580
MEAN	4854	4692	8756	12560	23230	21800	9637	5046	3876	3307	3422	3653
MAX	6480	5310	11300	14800	38500	33000	14600	6280	4160	3620	3870	4060
MIN	3940	4240	5490	10100	11100	15000	6410	4180	3650	3090	3040	3150
CFSM	.62	.60	1.11	1.59	2.95	2.77	1.22	.64	.49	.42	.43	.46
IN.	.71	.66	1.28	1.84	3.07	3.19	1.36	.74	.55	.48	.50	.52
AC-FT	298500	279200	538400	772400	1290000	1341000	573500	310300	230600	203300	210400	217400

CAL YR 1985 TOTAL 1668430 MEAN 4571 MAX 11300 MIN 2260 CFSM .58 IN 7.88 AC-FT 3309000
WTR YR 1986 TOTAL 3158310 MEAN 8653 MAX 38500 MIN 3040 CFSM 1.10 IN 14.91 AC-FT 6265000

02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.72	7.00	8.52	13.84	15.47	26.75	17.42	9.48	6.74	5.94	5.16	6.46
2	9.55	7.13	9.02	13.64	15.22	26.37	17.07	9.34	6.69	5.90	5.10	6.62
3	9.31	7.40	9.46	13.55	14.96	25.98	16.72	9.21	6.65	5.88	5.23	6.77
4	9.14	7.85	9.86	13.50	14.71	25.60	16.36	9.04	6.65	5.81	5.15	6.85
5	9.01	8.00	10.22	13.62	14.47	25.27	16.00	8.90	6.61	5.73	5.17	6.90
6	8.78	8.04	10.39	13.72	14.43	24.86	15.65	8.78	6.55	5.74	5.16	6.89
7	8.59	8.19	10.48	13.99	14.73	24.43	15.29	8.72	6.50	5.71	5.15	6.83
8	8.44	8.29	10.56	14.17	15.23	23.97	14.96	8.59	6.44	5.66	5.10	6.82
9	8.31	8.22	10.65	14.33	15.87	23.46	14.65	8.48	6.39	5.62	5.08	6.73
10	8.18	8.13	10.70	14.60	16.72	23.00	14.29	8.36	6.34	5.58	5.08	6.68
11	8.04	8.00	10.72	14.79	17.82	22.51	13.95	8.23	6.30	5.54	5.05	6.66
12	7.94	7.84	10.70	15.11	18.91	22.00	13.62	8.13	6.32	5.52	5.03	6.59
13	7.85	7.73	10.69	15.53	19.97	21.50	13.32	8.05	6.32	5.48	5.08	6.56
14	7.72	7.61	10.65	15.95	20.91	21.16	13.02	7.95	6.30	5.43	5.26	6.53
15	7.61	7.48	10.94	16.29	21.92	20.76	12.72	7.86	6.30	5.39	5.32	6.47
16	7.49	7.38	11.61	16.62	22.98	20.52	12.42	7.76	6.27	5.34	5.43	6.39
17	7.38	7.27	12.33	16.89	24.02	20.37	12.18	7.69	6.25	5.33	5.71	6.28
18	7.25	7.14	12.88	17.03	25.12	20.26	11.91	7.58	6.23	5.34	5.98	6.18
19	7.12	7.01	13.41	17.35	26.14	20.19	11.65	7.55	6.29	5.35	6.18	6.04
20	7.03	6.93	13.80	17.48	27.02	20.04	11.41	7.59	6.24	5.30	6.31	5.95
21	7.01	6.89	14.08	17.55	27.63	20.10	11.26	7.56	6.21	5.28	6.34	5.80
22	6.91	7.02	14.26	17.56	28.04	20.00	11.03	7.44	6.20	5.26	6.30	5.74
23	6.82	6.96	14.41	17.49	28.24	19.89	10.85	7.36	6.21	5.34	6.35	5.66
24	6.73	6.86	14.56	17.33	28.20	19.74	10.63	7.28	6.20	5.20	6.42	5.61
25	6.63	6.89	14.64	17.14	28.07	19.54	10.44	7.20	6.15	5.19	6.51	5.54
26	6.56	6.96	14.62	16.98	27.77	19.30	10.28	7.13	6.13	5.22	6.50	5.47
27	6.50	7.09	14.52	16.74	27.46	18.99	10.02	7.05	6.18	5.27	6.46	5.41
28	6.47	7.26	14.38	16.49	27.09	18.69	9.95	7.00	6.08	5.27	6.44	5.32
29	6.47	7.60	14.24	16.24	---	18.39	9.80	6.92	6.03	5.26	6.44	5.28
30	6.42	8.00	14.04	15.99	---	18.07	9.64	6.83	5.99	5.20	6.42	5.21
31	6.55	---	13.91	15.70	---	17.70	---	6.77	---	5.12	6.35	---
TOTAL	237.54	224.19	375.25	487.21	599.12	669.41	388.51	245.83	189.76	169.20	177.28	186.24
MEAN	7.66	7.47	12.10	15.72	21.40	21.59	12.95	7.93	6.33	5.46	5.72	6.21
MAX	9.72	8.29	14.64	17.56	28.24	26.75	17.42	9.48	6.74	5.94	6.51	6.90
MIN	6.42	6.86	8.52	13.50	14.43	17.70	9.64	6.77	5.99	5.12	5.03	5.21

CAL YR 1985 TOTAL 2575.07 MEAN 7.05 MAX 14.64 MIN 3.75
WTR YR 1986 TOTAL 3949.54 MEAN 10.82 MAX 28.24 MIN 5.03

02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1954 to September 1957, October 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 30...	0910	3940	308	8.00	22.0	1.0	6.2	72	K11	K20	150	16
JAN 28...	1115	13300	118	7.40	12.0	3.0	8.0	74	66	40	52	17
APR 16...	1700	8870	266	8.20	20.0	--	8.8	98	K20	K17	--	--
JUL 30...	1300	3150	342	8.10	25.0	1.5	6.5	79	K19	K20	160	17

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT 30...	16	45	8.6	4.3	6	.2	.50	132	129	132	161	2.6
JAN 28...	17	16	3.0	4.7	16	.3	1.0	36	36	35	43	2.7
APR 16...	--	--	--	--	--	--	--	113	--	112	137	1.4
JUL 30...	17	47	9.5	5.9	8	.2	.70	142	141	140	171	2.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT 30...	17	6.8	.20	7.7	193	170	.26	2050	.94	.020	.96	.080
JAN 28...	12	7.7	.10	6.7	101	73	.14	3630	--	<.010	.28	.010
APR 16...	--	--	--	--	--	--	--	--	.81	.010	.82	.020
JUL 30...	20	5.5	.20	7.8	191	180	.26	1620	--	<.010	1.0	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT 30...	.050	.06	--	.07	.32	.40	.210	.64	.200	.210	.64	20
JAN 28...	.010	.01	--	--	.69	.70	.140	.43	.120	.100	.31	250
APR 16...	.030	.04	3.6	.03	.38	.40	.150	.46	.130	.120	.37	--
JUL 30...	.010	.01	--	--	.27	.30	.160	.49	.130	.140	.43	30

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 30...	<1	12	.6	<1	<1	<3	1	120	<1	4	5
JAN 28...	<1	18	<.5	<1	<1	<3	10	360	1	<4	16
APR 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 30...	<1	12	<.5	<1	<1	<3	2	41	7	5	6

02320500 SUWANNEE RIVER AT BRANFORD, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 30...	<.1	<10	<1	<1	<1	87	<6	<3	6	64	50
JAN 28...	<.1	<10	<1	<1	<1	29	<6	29	1	36	--
APR 16...	--	--	--	--	--	--	--	--	6	144	50
JUL 30...	.1	<10	7	<1	<1	93	<6	16	4	34	50

02320700 SANTA FE RIVER NEAR GRAHAM, FL

LOCATION.--Lat 29°50'46", long 82°13'11", in NE¼ sec.32, T.7 S., R.21 E., Alachua County, Hydrologic Unit 03110206, near left bank on upstream side of bridge on State Highway 225, 1.0 mi south of Graham, 1.5 mi upstream from Sampson River, and 71 mi upstream from mouth.

DRAINAGE AREA.--94.9 mi^2.

PERIOD OF RECORD.--August 1957 to current year.

REVISED RECORDS.--WSP 2105: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 103.55 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges during water year: Oct. 27 to Dec. 3. Records good, except for period of missing record, which is fair. Records do not include diversions during periods of high stages from Santa Fe Lake through Lochloosa Creek in St. Johns River basin.

AVERAGE DISCHARGE.--28 years, 57.5 ft^3/s, 8.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,360 ft^3/s Sept. 12, 1964, gage height, 14.97 ft; minimum, 0.02 ft^3/s June 1, 1981, gage height, 2.72 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge base of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 11	2100	*449	*11.48	No other peak greater than base discharge			

Minimum discharge, 0.47 ft^3/s July 21, 22, 31, gage height, 3.04 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	180	35	25	51	87	78	14	.97	1.2	.60	52
2	53	170	33	29	48	84	72	13	.93	1.1	.63	68
3	51	150	32	28	46	81	67	11	.87	1.0	.80	34
4	55	140	30	28	44	80	62	9.1	.84	1.1	.93	26
5	48	120	29	72	42	83	58	7.6	.82	1.0	1.0	30
6	38	110	29	87	46	80	54	6.5	.86	1.0	1.1	29
7	40	100	27	101	57	76	51	5.5	.79	.97	1.6	23
8	44	95	26	121	85	71	48	4.8	.75	.90	1.3	19
9	50	85	25	114	174	67	45	4.2	.72	.87	.96	16
10	55	80	24	140	328	64	42	3.4	.72	.79	1.4	52
11	53	75	23	242	383	61	39	2.8	.71	.77	1.6	279
12	50	70	23	236	400	58	36	2.4	.70	.75	2.3	171
13	46	65	23	228	345	62	34	2.1	.67	.70	2.3	180
14	47	60	31	201	305	128	32	1.9	.70	.66	7.7	162
15	54	56	33	177	271	207	30	1.7	.73	.62	18	134
16	54	54	33	155	237	269	28	1.5	.73	.62	48	103
17	51	52	34	133	205	276	27	1.3	.71	.63	30	78
18	65	50	33	116	182	263	25	1.3	9.2	.63	24	59
19	60	49	31	109	166	243	24	1.7	21	.60	21	45
20	53	48	29	102	152	220	23	3.6	18	.54	20	35
21	50	49	28	94	141	199	24	2.8	10	.52	49	27
22	47	52	26	87	130	180	25	2.4	6.0	.53	32	22
23	48	56	25	81	121	160	26	2.5	4.7	.59	25	17
24	47	54	24	74	115	144	26	2.3	3.5	.60	20	14
25	132	52	25	68	107	132	25	1.9	2.6	.56	17	10
26	213	48	23	69	99	122	23	1.6	1.9	.62	17	7.2
27	225	45	22	69	93	111	22	1.3	1.5	.62	13	5.2
28	300	40	21	63	88	103	20	1.3	1.3	.60	9.8	3.9
29	270	38	21	59	---	96	19	1.2	1.3	.58	12	3.0
30	240	36	20	57	---	89	16	1.0	1.3	.53	26	2.4
31	200	---	19	54	---	84	---	1.0	---	.52	65	---
TOTAL	2794	2279	837	3219	4461	3980	1101	118.7	95.52	22.72	471.02	1708.7
MEAN	90.1	76.0	27.0	104	159	128	36.7	3.83	3.18	.73	15.2	56.9
MAX	300	180	35	242	400	276	78	14	21	1.2	65	279
MIN	38	36	19	25	42	58	16	1.0	.67	.52	.60	2.4
CFSM	.95	.80	.29	1.10	1.68	1.35	.39	.04	.03	.008	.16	.60
IN.	1.10	.89	.33	1.26	1.75	1.56	.43	.05	.04	.01	.18	.67
AC-FT	5540	4520	1660	6380	8850	7890	2180	235	189	45	934	3390

CAL YR 1985 TOTAL 16960.56 MEAN 46.5 MAX 506 MIN .11 CFSM .49 IN 6.65 AC-FT 33640
WTR YR 1986 TOTAL 21085.66 MEAN 57.8 MAX 400 MIN .52 CFSM .61 IN 8.27 AC-FT 41820

02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°55'18", long 82°25'35", in SE¼ sec.32, T.6 S., R.19 E., Alachua County, Hydrologic Unit 03110206, near center of span on downstream side of bridge on State Highway 121, 0.5 mi south of Worthington Springs, 0.8 mi downstream from New River, and 51 mi upstream from mouth.

DRAINAGE AREA.--575 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1931 to current year. Published as "near Worthington" prior to October 1965. Monthly discharge only for October 1931, published in WSP 1304.

REVISED RECORDS.--WSP 2105: WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.74 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 16, 1939, nonrecording gage at site 0.2 mi downstream at present datum and Jan. 16, 1939, to July 23, 1953, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges during water year. Records good. Records do not include diversions, during periods of high stages from Santa Fe Lake through Lochloosa Creek in St. Johns River basin.

AVERAGE DISCHARGE.--55 years, 442 ft^3/s, 10.44 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,000 ft^3/s Sept. 13, 1964, gage height, 28.40 ft; minimum, 0.50 ft^3/s June 24, 1955, gage height, 6.74 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,920 ft^3/s Feb. 13, gage height, 18.99 ft; minimum, 15 ft^3/s June 10-12, gage height, 7.29 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	451	2030	192	126	300	530	409	53	18	41	41	397
2	436	2370	184	165	283	493	363	51	18	43	37	504
3	393	2140	174	180	266	460	324	50	20	41	45	485
4	387	1910	163	181	252	438	291	47	21	39	43	418
5	751	1660	156	295	240	455	262	44	21	39	39	862
6	1160	1410	150	489	267	469	238	42	19	53	44	1020
7	935	1180	142	562	413	478	218	40	18	61	67	727
8	694	965	136	631	603	459	200	38	17	71	87	574
9	555	779	131	631	1330	421	184	37	16	68	94	451
10	464	677	126	659	2090	385	168	36	15	54	77	406
11	445	596	123	1020	2950	357	154	34	15	45	65	802
12	438	528	120	1390	3740	331	142	32	15	41	69	1130
13	436	476	119	1570	3830	309	132	31	17	37	79	1180
14	431	432	143	1550	3350	368	123	29	22	36	126	1040
15	407	397	162	1420	2750	613	117	27	26	33	172	806
16	380	368	169	1280	2250	1110	110	26	31	29	198	658
17	355	341	165	1130	1870	1640	102	25	35	25	232	526
18	331	316	159	959	1640	2020	96	25	31	22	227	412
19	305	293	153	816	1480	2070	90	26	70	22	197	323
20	284	276	146	730	1310	1960	86	53	113	27	189	261
21	267	265	140	656	1170	1780	88	74	150	22	193	216
22	251	306	132	593	1040	1590	90	62	142	25	201	184
23	236	317	126	538	925	1370	83	50	129	48	211	159
24	235	295	122	485	829	1200	79	40	96	69	201	141
25	233	273	121	438	756	1040	76	34	68	78	183	125
26	226	254	118	417	690	881	73	30	55	73	164	110
27	232	236	113	416	629	755	70	27	48	57	148	100
28	242	221	110	393	573	669	67	24	43	47	148	92
29	332	209	109	368	---	593	62	22	38	52	171	84
30	747	200	108	346	---	528	56	20	39	54	274	79
31	1480	---	106	322	---	463	---	19	---	48	377	---
TOTAL	14519	21720	4318	20757	37826	26235	4553	1148	1366	1400	4399	14272
MEAN	468	724	139	670	1351	846	152	37.0	45.5	45.2	142	476
MAX	1480	2370	192	1570	3830	2070	409	74	150	78	377	1180
MIN	226	200	106	126	240	309	56	19	15	22	37	79
CFSM	.81	1.26	.24	1.17	2.35	1.47	.26	.06	.08	.08	.25	.83
IN.	.94	1.41	.28	1.34	2.45	1.70	.29	.07	.09	.09	.28	.92
AC-FT	28800	43080	8560	41170	75030	52040	9030	2280	2710	2780	8730	28310

CAL YR 1985 TOTAL 164627.0 MEAN 451 MAX 6980 MIN 5.9 CFSM .78 IN 10.65 AC-FT 326500
WTR YR 1986 TOTAL 152513.0 MEAN 418 MAX 3830 MIN 15 CFSM .73 IN 9.87 AC-FT 302500

02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1957 to September 1960, October 1963 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
29...	1240	324	94	7.00	23.5	2.0	6.3	75	K1300	>2000	33	11
JAN												
29...	1140	370	96	6.60	7.0	1.5	10.6	87	80	290	31	21
APR												
16...	0950	111	107	7.20	19.0	--	7.9	86	59	68	--	--
JUL												
31...	0915	49	170	7.80	26.5	3.0	5.8	73	58	140	67	17

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT												
29...	11	8.6	2.7	6.0	28	.5	1.4	32	15	22	27	4.3
JAN												
29...	21	7.9	2.8	7.2	33	.6	.90	13	11	11	13	5.2
APR												
16...	--	--	--	--	--	--	--	13	--	15	19	1.9
JUL												
31...	17	17	6.0	7.1	18	.4	2.2	51	51	50	61	1.5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
29...	9.9	11	<.10	5.2	60	60	.08	52	.26	.030	.29	.110
JAN												
29...	18	15	<.10	5.2	97	65	.13	97	--	<.010	.14	.20
APR												
16...	--	--	--	--	--	--	--	--	.23	.010	.24	.060
JUL												
31...	15	10	.20	6.3	126	96	.17	17	--	<.010	.30	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT												
29...	.100	.13	--	.10	1.3	1.4	.240	.74	.180	.190	.58	200
JAN												
29...	.020	.03	--	--	.78	.80	.130	.40	.130	.100	.31	350
APR												
16...	.030	.04	1.0	.03	.74	.80	.210	.64	.200	.170	.52	--
JUL												
31...	.050	.06	--	--	.77	.80	.650	2.0	.550	.580	1.8	60

02321500 SANTA FE RIVER AT WORTHINGTON SPRINGS, FL--Continued

WATER-QUALITY RECORDS--CONTINUED

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 29...	<1	13	1.0	<1	1	<3	1	510	2	<4	20
JAN 29...	<1	12	<.5	<1	1	<3	5	360	4	<4	8
APR 16...	--	--	--	--	--	--	--	--	--	--	--
JUL 31...	1	14	<.5	<1	<1	<3	1	210	<5	<4	19

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 29...	<.1	<10	1	<1	<1	27	<6	4	16	14	56
JAN 29...	<.1	<10	2	<1	<1	26	<6	10	3	3.0	67
APR 16...	--	--	--	--	--	--	--	--	5	1.5	60
JUL 31...	<.1	<10	1	<1	2	65	<6	7	6	.79	67

02322016 BLUES CREEK NEAR GAINESVILLE, FL

LOCATION.--Lat 29°43'41", long 82°25'54", in NW¼ sec.8, T.9 S., R.19 E., Alachua County, Hydrologic Unit 03080102, about 1 mi above sink, 1 mi northwest of University of Florida Agricultural Experiment Station, 6.0 mi southeast of Alachua and 7.6 mi northwest of Gainesville.

DRAINAGE AREA.--5.04 mi^2, of which 3.5 mi^2 are noncontributing at low and medium discharge.

PERIOD OF RECORD.--June 1984 to current year.

GAGE.--Water-stage recorder. Elevation of the gage is 105 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 10 - June 12, July 18-22. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 209 ft^3/s, Aug. 31, 1985, gage height, 6.15 ft (from high-water marks); minimum daily, 0.16 ft^3/s, June 7, 8, 12, 1986 estimated.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 87 ft^3/s, Feb. 9, gage height 4.81 ft; minimum daily, 0.16 ft^3/s, June 7, 8, 12, estimated.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	13	1.9	4.3	3.1	3.8	2.7	.63	.19	.53	1.5	4.0
2	3.5	15	1.9	3.8	3.0	3.5	2.5	.60	.18	.55	1.4	3.3
3	3.4	14	1.7	3.3	2.9	3.6	2.3	.57	.18	.61	1.8	3.1
4	3.3	11	1.7	5.4	2.8	3.4	2.2	.55	.17	.56	2.2	4.6
5	3.2	8.5	1.6	17	2.6	3.3	2.1	.54	.17	1.1	2.1	21
6	3.2	7.2	1.6	14	4.3	3.1	2.0	.53	.17	1.2	1.8	11
7	3.1	5.9	1.5	12	5.3	2.9	1.8	.56	.16	1.2	1.5	6.8
8	2.9	4.9	1.5	11	12	2.6	1.6	.56	.16	1.0	1.3	4.9
9	2.8	4.1	1.5	9.6	22	2.5	1.4	.52	.18	1.1	1.4	5.5
10	2.9	3.8	1.4	24	36	2.4	1.3	.49	.17	.85	1.5	13
11	3.1	3.3	1.4	22	32	2.3	1.3	.47	.17	.81	1.6	18
12	3.0	3.1	1.4	17	22	2.3	1.2	.44	.16	.78	2.0	13
13	2.9	2.8	1.9	14	16	2.3	1.2	.42	1.0	.71	3.1	8.8
14	2.8	2.6	4.1	11	12	5.5	1.1	.41	3.4	.66	11	6.6
15	2.6	2.4	3.1	9.3	10	19	1.0	.49	2.1	.65	9.2	5.3
16	2.5	2.2	2.5	8.1	8.4	20	.98	.37	1.3	.59	5.7	4.5
17	2.6	2.1	2.2	7.3	7.4	18	.93	.35	1.0	.55	4.1	3.9
18	2.5	1.9	2.0	6.7	7.7	14	.88	.33	.92	.50	3.2	3.6
19	2.4	1.9	1.8	8.1	6.8	11	.86	.32	1.3	.47	2.8	3.3
20	2.4	1.8	1.7	7.2	5.8	9.5	.83	.30	1.8	.45	4.0	2.9
21	2.4	2.0	1.7	6.1	5.2	9.2	2.6	.29	1.6	.43	6.0	2.6
22	2.2	3.5	1.6	5.4	4.6	7.4	1.5	.28	1.1	2.5	5.2	2.4
23	2.1	3.3	1.6	4.9	6.0	6.1	1.2	.27	.95	3.6	4.0	2.3
24	2.0	2.9	1.7	4.4	5.9	5.3	1.0	.26	.82	2.5	3.2	2.0
25	2.1	2.6	1.7	4.1	5.0	4.6	.94	.25	.70	1.7	2.6	1.8
26	2.2	2.5	1.6	4.5	4.4	4.1	.85	.24	.64	1.2	2.5	1.6
27	2.8	2.3	1.6	4.5	4.0	3.7	.79	.23	.58	2.3	2.4	1.5
28	2.6	2.2	1.5	4.2	3.9	3.5	.75	.22	.55	7.4	2.2	1.6
29	3.2	2.2	1.5	3.8	---	3.2	.72	.21	.51	4.1	4.3	2.4
30	3.9	2.1	1.5	3.6	---	3.1	.68	.20	.53	2.6	5.6	2.0
31	5.9	---	1.5	3.3	---	2.9	---	.20	---	2.0	5.0	---
TOTAL	90.3	137.1	55.9	263.9	261.1	188.1	41.21	12.10	22.86	45.20	106.2	167.3
MEAN	2.91	4.57	1.80	8.51	9.33	6.07	1.37	39	.76	1.46	3.43	5.58
MAX	5.9	15	4.1	24	36	20	2.7	.63	3.4	7.4	11	21
MIN	2.0	1.8	1.4	3.3	2.6	2.3	.68	.20	.16	.43	1.3	1.5
AC-FT	179	272	111	523	518	373	82	24	45	90	211	332

CAL YR 1985 TOTAL 1232.50 MEAN 3.38 MAX 147 MIN .20 AC-FT 2440
WTR YR 1986 TOTAL 1391.27 MEAN 3.81 MAX 36 MIN .16 AC-FT 2760

02322500 SANTA FE RIVER NEAR FORT WHITE, FL

LOCATION.--Lat 29°50'55", long 82°42'55", in SE¼ sec.28, T.7 S., R.16 E., Gilchrist County, Hydrologic Unit 03110206, on left bank 2.1 mi upstream from bridge on State Highway 47, 5.1 mi south of Fort White, and 18 mi upstream from mouth.

DRAINAGE AREA.--1,017 mi^2.

PERIOD OF RECORD.--October 1927 to January 1930, June 1932 to current year.

REVISED RECORDS.--WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 20.86 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to June 3, 1932, nonrecording gage at several sites within 200 ft of present site at various datums. Oct. 1, 1947 to Feb. 10, 1949, auxiliary nonrecording gage and since Feb. 11, 1949, auxiliary water-stage recorder at bridge on U.S. Highway 129, 16 mi downstream from base gage at datum 3.5 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges during water year. Records good.

AVERAGE DISCHARGE.--56 years (water years 1928-29, 1933-86), 1,617 ft^3/s, 21.59 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s Sept. 16, 1964, gage height, 15.34 ft; minimum 609 ft^3/s May 22, 1957; minimum gage height, 0.45 ft Mar. 20, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,210 ft^3/s Feb. 16; maximum gage height, 7.12 ft Feb. 25; minimum discharge, 1,070 ft^3/s July 17-23; minimum gage height, 0.90 ft July 18-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	1890	1530	1290	1650	2370	2120	1330	1150	1120	1090	1400
2	2250	2060	1510	1270	1620	2330	2070	1320	1140	1120	1090	1450
3	2210	2260	1480	1280	1600	2300	2020	1310	1140	1120	1090	1490
4	2180	2380	1470	1300	1570	2280	1970	1300	1130	1120	1080	1510
5	2150	2420	1470	1320	1550	2270	1940	1290	1130	1120	1080	1520
6	2150	2410	1450	1330	1540	2240	1880	1280	1130	1110	1080	1560
7	2200	2380	1430	1400	1530	2220	1830	1270	1120	1100	1080	1650
8	2220	2330	1420	1460	1600	2200	1790	1270	1120	1110	1080	1670
9	2180	2260	1400	1520	1700	2150	1750	1260	1120	1110	1080	1680
10	2140	2200	1390	1640	1930	2120	1700	1240	1120	1110	1100	1690
11	2090	2140	1380	1730	2200	2070	1670	1240	1110	1100	1090	1740
12	2040	2080	1370	1840	2490	2020	1640	1240	1110	1100	1100	1810
13	2020	2030	1380	2050	2760	1970	1620	1230	1120	1090	1110	1870
14	1990	1970	1350	2200	3000	1970	1580	1220	1130	1080	1140	1920
15	1970	1920	1340	2290	3160	1980	1550	1210	1110	1080	1170	1940
16	1940	1880	1360	2320	3190	2020	1530	1200	1100	1080	1180	1930
17	1900	1830	1380	2310	3090	2080	1510	1200	1110	1080	1200	1880
18	1870	1800	1390	2290	2940	2190	1490	1200	1130	1070	1200	1830
19	1850	1760	1380	2250	2760	2350	1470	1200	1140	1070	1200	1770
20	1820	1730	1380	2190	2550	2500	1460	1190	1140	1070	1220	1720
21	1800	1720	1370	2120	2340	2580	1470	1190	1150	1080	1230	1670
22	1770	1690	1360	2060	2210	2600	1440	1190	1160	1070	1230	1620
23	1740	1660	1360	2020	2140	2570	1410	1190	1170	1080	1240	1590
24	1720	1650	1350	1970	2140	2530	1400	1180	1170	1080	1250	1550
25	1700	1640	1330	1930	2220	2480	1400	1180	1160	1090	1250	1510
26	1690	1620	1300	1910	2260	2440	1390	1170	1150	1090	1240	1480
27	1670	1600	1300	1870	2330	2400	1380	1170	1140	1100	1240	1460
28	1670	1580	1300	1810	2360	2340	1370	1160	1140	1110	1240	1430
29	1660	1560	1300	1780	---	2280	1350	1160	1130	1100	1300	1410
30	1670	1540	1280	1740	---	2220	1340	1150	1130	1090	1290	1390
31	1730	---	1270	1680	---	2170	---	1150	---	1090	1340	---
TOTAL	60290	57990	42780	56170	62430	70240	48530	37890	34000	33940	36310	49140
MEAN	1945	1933	1380	1812	2230	2266	1618	1222	1133	1095	1171	1638
MAX	2300	2420	1530	2320	3190	2600	2120	1330	1170	1120	1340	1940
MIN	1660	1540	1270	1270	1530	1970	1340	1150	1100	1070	1080	1390
CFSM	1.91	1.90	1.36	1.78	2.19	2.23	1.59	1.20	1.11	1.08	1.15	1.61
IN.	2.21	2.12	1.56	2.05	2.28	2.57	1.78	1.39	1.24	1.24	1.33	1.80
AC-FT	119600	115000	84850	111400	123800	139300	96260	75150	67440	67320	72020	97470

CAL YR 1985 TOTAL 594580 MEAN 1629 MAX 5750 MIN 1100 CFSM 1.60 IN 21.75 AC-FT 1179000
WTR YR 1986 TOTAL 589710 MEAN 1616 MAX 3190 MIN 1070 CFSM 1.59 IN 21.57 AC-FT 1170000

02323500 SUWANNEE RIVER NEAR WILCOX, FL

LOCATION.--Lat 29°35'22", long 82°56'12", in NW¼ sec.29, T.10 S., R.14 E., Levy County, Hydrologic Unit 03110205, on left bank about 400 ft downstream from Fort Fannin Bridge on U.S. Highway 19, 2.0 mi southwest of Wilcox and 33 mi upstream from mouth.

DRAINAGE AREA.--9,640 mi^2, approximately, includes part of watershed in Okefenokee Swamp which is indeterminate.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to September 1931, October 1941 to current year. Monthly discharge only for some periods, published in WSP 1304.

REVISED RECORDS.--WSP 1905: WDR FL-75-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 0.53 ft below National Geodetic Vertical Datum of 1929. Prior to July 4, 1931, nonrecording gage at site 400 ft upstream at present datum. July 4 to Sept. 30, 1931, and Mar. 26 to May 14, 1942, water-stage recorder, and May 15, 1942 to Jan. 24, 1951, nonrecording gage at present site and datum. Since Feb. 1, 1951, auxiliary water-stage recorder about 9.0 mi downstream from base gage. Datum of gage is 2.99 ft below National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Sept. 9-30. Records fair. Flow generally affected by tide when discharge is less than 17,500 ft^3/s.

AVERAGE DISCHARGE.--46 years (water years 1931, 1942-86), 10,600 ft^3/s, 14.93 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 84,700 ft^3/s Apr. 14, 1948, gage height, 22.32 ft; minimum daily since January 1951, 2,960 ft^3/s Oct. 25, 1981; minimum gage height since January 1951, 0.57 ft Jan. 19, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41,300 ft^3/s Feb. 27; gage height, 15.63 ft; minimum daily, 5,160 ft^3/s Aug. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11100	6310	9140	14600	17800	40200	21300	11000	7000	6290	5690	6950
2	10700	8630	9920	15000	17600	39200	20800	10700	6770	6340	5340	6980
3	11000	8370	11600	15000	17400	38100	20400	11100	6810	6260	5740	6730
4	10900	9840	11400	14800	16800	37100	19900	11100	7200	6270	5600	7100
5	11000	10700	11400	15100	16100	36100	19400	9890	6960	5990	5480	6940
6	12100	10500	12500	15900	15900	35000	19000	9650	6650	6110	5420	6820
7	12100	10200	12600	15500	16000	33900	18500	9590	6600	6200	5520	6500
8	11500	10600	12000	16300	16400	32900	18000	9270	6550	6040	5520	6570
9	11300	10200	11800	16800	16900	31900	17600	9210	6560	5940	5550	6600
10	10600	9670	11800	15600	17300	30900	17500	9450	6650	5890	5490	6570
11	9750	9750	10800	15800	18100	30100	16700	8830	6610	6030	5570	6560
12	9280	9540	10300	16600	18900	29200	16100	8510	6660	6010	5330	6510
13	9080	9270	10200	16700	19700	28300	15300	8550	6750	5930	5160	6490
14	8940	9220	11000	17500	20800	27700	15500	8500	6830	6070	6090	6470
15	8730	9040	12600	17600	22100	27200	15200	8650	6640	5960	6040	6430
16	8680	8930	12600	18200	23300	26500	14800	8430	6810	5930	5880	6370
17	8820	8750	13200	17800	24500	25700	14900	8150	6840	5840	5950	6320
18	8970	8760	13800	18200	26100	25100	15100	7870	6780	5700	6160	6270
19	8880	8990	14600	18700	27900	24700	14800	7810	6740	5600	6050	6190
20	8570	8040	15200	19000	29800	24500	13500	7580	6460	5530	6160	6150
21	8340	6500	15400	19100	32000	24400	12300	7840	6620	5380	6080	6070
22	8190	7410	15700	19200	34400	24100	12600	7800	6300	5450	6580	6040
23	8010	8720	15300	19300	36900	23900	13200	7560	6270	5610	6570	6000
24	8100	8180	14600	19400	38900	23800	12400	7430	6430	5620	6730	5980
25	8300	7900	15100	19300	40400	23600	11500	7370	6510	5520	6740	5960
26	8050	7720	16600	19300	41100	23500	11300	7210	6590	5470	6690	5930
27	7330	7810	15900	19100	41300	23300	11200	7250	6860	5480	6560	5900
28	6990	7760	15600	18700	41000	23000	11100	7250	6430	5490	6610	5870
29	7270	8350	15300	18400	---	22600	11100	7400	6360	5690	6960	5850
30	6590	8900	15600	18200	---	22200	11100	7140	6320	5580	6760	5810
31	6000	---	15200	17800	---	21700	---	7220	---	5670	7000	---
TOTAL	285170	264560	408760	538500	705400	880400	462100	265310	199560	180890	187020	190930
MEAN	9199	8819	13190	17370	25190	28400	15400	8558	6652	5835	6033	6364
MAX	12100	10700	16600	19400	41300	40200	21300	11100	7200	6340	7000	7100
MIN	6000	6310	9140	14600	15900	21700	11100	7140	6270	5380	5160	5810
CFSM	.95	.92	1.37	1.80	2.61	2.95	1.60	.89	.69	.61	.63	.66
IN.	1.10	1.02	1.58	2.08	2.72	3.40	1.78	1.02	.77	.70	.72	.74
AC-FT	565600	524800	810800	1068000	1399000	1746000	916600	526200	395800	358800	371000	378700

CAL YR 1985	TOTAL	2845300	MEAN	7795	MAX	16600	MIN	4240	CFSM	.81	IN 10.98	AC-FT 5644000
WTR YR 1986	TOTAL	4568600	MEAN	12520	MAX	41300	MIN	5160	CFSM	1.30	IN 17.63	AC-FT 9062000

02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.70	6.07	4.73	7.36	7.86	15.39	9.52	5.11	3.98	3.69	3.11	4.01
2	5.69	5.26	4.84	7.13	7.74	15.16	9.33	5.05	4.06	3.65	3.35	4.14
3	5.60	4.92	4.55	7.00	7.63	14.90	9.14	4.91	4.11	3.74	3.37	4.23
4	5.54	4.77	4.71	6.98	7.62	14.65	8.95	4.65	3.91	3.54	3.31	4.22
5	5.44	4.44	4.98	7.07	7.59	14.39	8.77	4.73	3.79	3.61	3.39	4.30
6	5.05	4.55	5.01	6.67	7.49	14.12	8.59	4.87	3.85	3.57	3.47	4.32
7	4.82	4.73	4.98	6.82	7.43	13.84	8.40	4.88	3.95	3.44	3.43	4.34
8	4.79	4.78	5.19	6.71	7.47	13.55	8.22	4.83	3.94	3.44	3.38	4.24
9	4.78	4.74	5.36	6.59	7.62	13.25	8.07	4.77	3.89	3.53	3.35	4.20
10	4.79	4.89	5.43	7.17	7.87	12.97	7.83	4.56	3.78	3.54	3.27	4.23
11	4.97	4.85	5.49	7.39	8.24	12.69	7.61	4.52	3.73	3.44	3.29	4.28
12	5.04	4.79	5.67	7.28	8.54	12.39	7.45	4.61	3.71	3.30	3.37	4.23
13	5.03	4.78	5.81	7.43	8.87	12.10	7.34	4.64	3.65	3.33	3.92	4.13
14	4.99	4.68	5.79	7.46	9.31	11.92	7.13	4.55	3.61	3.22	3.72	4.05
15	5.01	4.60	5.26	7.68	9.82	11.74	6.91	4.40	3.62	3.18	3.52	4.07
16	4.97	4.54	5.35	7.76	10.31	11.49	6.75	4.33	3.63	3.19	3.47	4.15
17	4.84	4.42	5.74	7.91	10.81	11.23	6.56	4.34	3.61	3.23	3.49	4.16
18	4.63	4.09	6.14	8.08	11.38	11.01	6.31	4.46	3.75	3.28	3.56	4.03
19	4.49	3.95	6.27	8.30	11.97	10.88	6.13	4.59	3.87	3.35	3.74	3.91
20	4.50	3.96	6.39	8.35	12.60	10.81	6.07	4.67	3.96	3.41	4.06	3.88
21	4.55	4.89	6.58	8.33	13.28	10.74	6.24	4.70	3.89	3.57	4.25	3.83
22	4.53	5.19	6.66	8.38	13.95	10.65	6.13	4.46	3.87	3.54	3.85	3.81
23	4.50	4.22	6.96	8.46	14.60	10.56	5.86	4.37	3.94	3.44	3.72	3.75
24	4.42	3.97	7.36	8.48	15.09	10.50	5.71	4.35	3.96	3.40	3.68	3.73
25	4.19	4.05	7.40	8.46	15.42	10.45	5.72	4.30	3.89	3.39	3.73	3.62
26	4.13	4.25	7 01	8.56	15.57	10.39	5.73	4.28	3.77	3.45	3.77	3.43
27	4.38	4.33	7.14	8.43	15.61	10.31	5.65	4.24	3.64	3.56	3.70	3.33
28	4.70	4.56	7.24	8.18	15.55	10.19	5.53	4.17	3.62	3.64	3.77	3.32
29	4.66	4.71	7.31	8.17	---	10.05	5.40	4.04	3.68	3.38	3.93	3.44
30	4.80	4.68	7.12	8.17	---	9.88	5.25	3.96	3.69	3.32	3.89	3.55
31	5.40	---	7.14	8.01	---	9.70	---	3.96	---	3.25	3.87	---
TOTAL	150.93	138.66	185.61	238.77	297.24	371.90	212.30	140.30	114.33	106.62	111.73	118.93
MEAN	4.87	4.62	5.99	7.70	10.62	12.00	7.08	4.53	3.81	3.44	3.60	3.96
MAX	5.70	6.07	7.40	8.56	15.61	15.39	9.52	5.11	4.11	3.74	4.25	4.34
MIN	4.13	3.95	4.55	6.59	7.43	9.70	5.25	3.96	3.61	3.18	3.11	3.32

CAL YR 1985 TOTAL 1480.92 MEAN 4.06 MAX 7.83 MIN 2.43
WTR YR 1986 TOTAL 2187.32 MEAN 5.99 MAX 15.61 MIN 3.11

02323500 SUWANNEE RIVER NEAR WILCOX, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
DEC									
10...	0940	13800	170	6.30	16.0	4.0	7.3	.9	.10
FEB									
05...	0905	16600	159	6.80	14.5	2.2	8.0	.8	.20
APR									
02...	1420	20800	200	6.10	20.0	1.7	6.0	1.2	.20
JUN									
03...	1015	6030	300	6.10	29.0	1.0	6.0	.2	.20
AUG									
04...	1510	4280	--	--	28.0	--	--	--	--
06...	1445	4320	330	7.70	27.0	.50	7.5	.3	.20

DATE	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
DEC									
10...	.31	.010	.32	.010	.83	.84	1.2	5.1	.190
FEB									
05...	.45	.020	.47	.100	.38	.48	.95	4.2	.170
APR									
02...	.44	.010	.45	.020	.56	.58	1.0	4.6	.150
JUN									
03...	.98	.010	.99	.010	.07	.08	1.1	4.7	.120
AUG									
04...	--	--	--	--	--	--	--	--	--
06...	.79	.010	.80	.030	.24	.27	1.1	4.7	.190

DATE	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	ALUM-INUM, RECOV. FM BOT-TOM MA-TERIAL (UG/G)	IRON, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS FE)	CADMIUM RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CD)	COPPER, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS CU)	LEAD, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS PB)	ZINC, RECOV. FM BOT-TOM MA-TERIAL (UG/G AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
DEC								
10...	.140	--	--	--	--	--	--	24
FEB								
05...	.120	--	--	--	--	--	--	20
APR								
02...	.130	--	--	--	--	--	--	18
JUN								
03...	.100	--	--	--	--	--	--	1.5
AUG								
04...	--	430	660	<1	<1	<10	<10	--
06...	.160	--	--	--	--	--	--	3.2

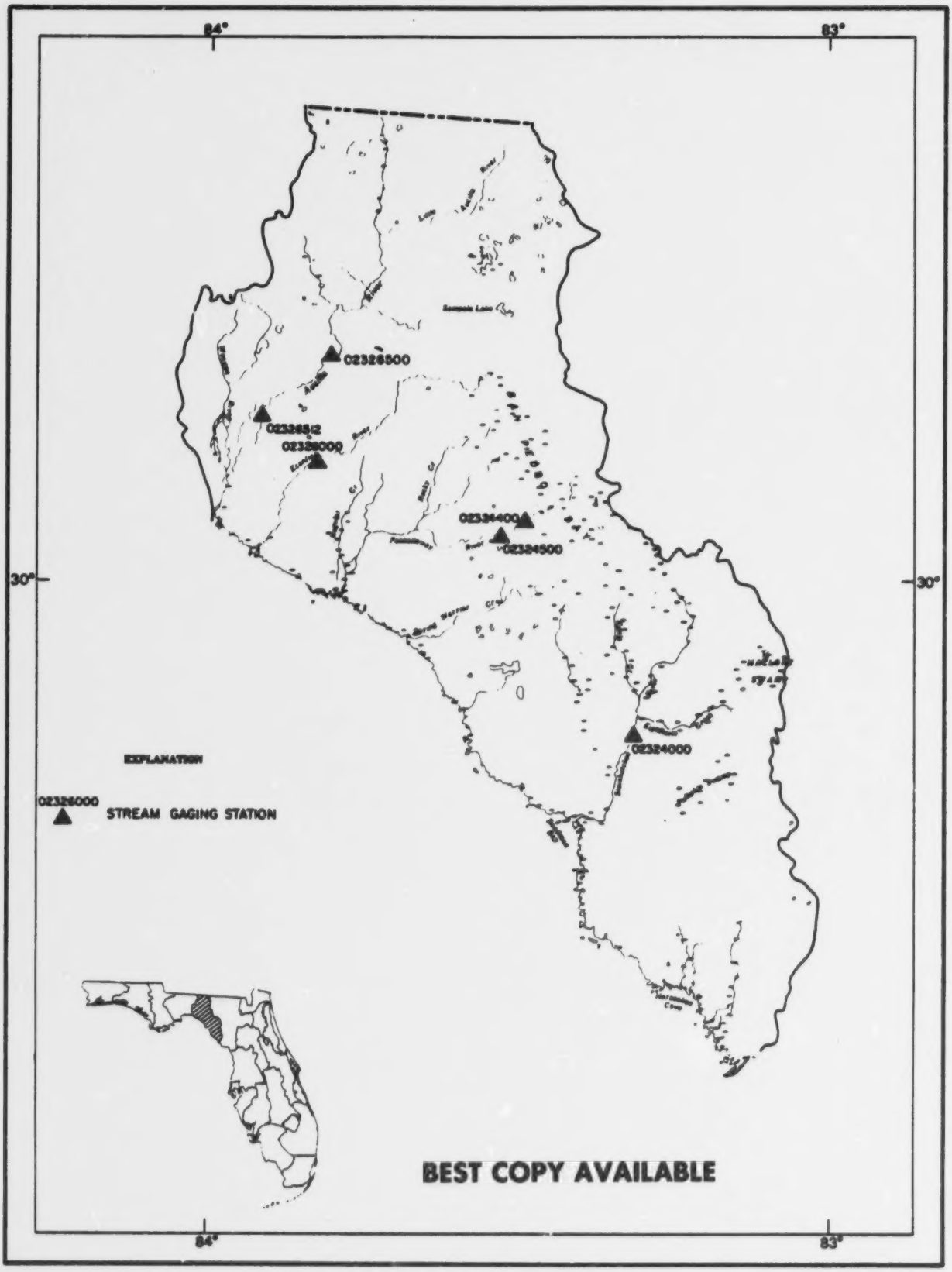

Figure 13. Location of stream gaging stations in the Steinhatchee, Fenholloway, Econfina, and Aucilla River basins.

02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL
(National stream-quality accounting network station)

LOCATION.--Lat 29°47'11", long 83°19'18", in NE¼ sec.16, T.8 S., R.10 E., Taylor County, Hydrologic Unit 03110102, on right bank 0.7 mi downstream from Atlantic Coast Line Railroad bridge, 0.7 mi south of Clara, 13 mi upstream from mouth, and 16 mi northwest of Cross City.

DRAINAGE AREA.--350 mi^2, approximately. See REMARKS.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 1234: 1950. WSP 1724: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.84 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges during water year. Records fair. Below about 500 ft^3/s, all flow enters sinkhole 0.5 mi downstream from gage. Above about 4,000 ft^3/s, discharge measurements are made along U.S. Highways 19, 98, and Alternate 27, measurements include all flow from about 3 mi northwest to 5 mi southwest of main channel, drainage area is increased by about 30 mi^2.

AVERAGE DISCHARGE.--36 years, 334 ft^3/s, 12.96 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,600 ft^3/s Sept. 13, 14, 1964, gage height, 18.90 ft; minimum, 2.5 ft^3/s July 18, 1981; minimum gage height, 2.38 ft July 29-31, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,030 ft^3/s, Nov. 4, gage height, 14.83 ft; minimum daily discharge, 14.0 ft^3/s, May 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	810	1050	407	395	539	722	217	26	20	57	109	1660
2	768	1610	412	446	504	639	196	24	25	52	88	1580
3	837	2230	402	482	471	578	174	24	24	55	90	1440
4	933	3000	380	474	440	552	156	22	53	65	79	1280
5	847	2880	369	760	412	577	141	21	45	55	104	1150
6	768	2560	353	870	429	547	126	21	37	55	96	1040
7	698	2230	327	1040	504	521	113	19	32	63	92	918
8	632	1940	307	1170	599	496	101	26	29	53	79	828
9	577	1650	289	1190	798	469	92	26	27	42	87	804
10	526	1420	271	1310	1110	444	81	22	43	36	124	728
11	499	1250	254	1640	1270	421	73	20	35	32	110	776
12	468	1130	241	1820	1380	401	68	19	31	34	90	1120
13	427	1020	274	1930	1410	375	67	17	34	35	538	1150
14	392	922	414	1890	1360	400	63	17	55	39	1370	1050
15	357	839	391	1760	1290	500	58	16	59	34	1780	902
16	327	764	385	1590	1210	574	54	16	59	29	1820	766
17	298	692	382	1440	1130	619	50	15	60	25	1570	626
18	270	622	375	1310	1080	626	47	14	58	23	1290	511
19	246	564	359	1230	1080	612	45	15	82	22	1170	433
20	231	528	336	1160	1060	584	43	23	130	21	1160	360
21	227	517	315	1080	1040	557	43	31	147	21	1060	302
22	221	497	296	1010	997	512	43	30	126	22	1050	255
23	202	487	276	938	1050	475	40	26	101	22	960	227
24	179	488	267	870	1050	444	37	23	80	22	843	209
25	161	481	275	802	988	413	36	23	67	24	712	194
26	144	466	275	784	908	384	34	22	57	27	708	176
27	134	445	250	782	840	353	33	21	55	42	725	157
28	129	422	229	716	780	322	31	20	60	154	882	141
29	121	402	224	666	---	293	30	18	70	203	1260	122
30	125	384	214	626	---	265	28	16	66	154	1640	118
31	275	---	205	581	---	239	---	15	---	129	1690	---
TOTAL	12829	33490	9754	32742	25729	14914	2320	648	1767	1647	23376	21023
MEAN	414	1116	315	1056	919	481	77.3	20.9	58.9	53.1	754	701
MAX	933	3000	414	1930	1410	722	217	31	147	203	1820	1660
MIN	121	384	205	395	412	239	28	14	20	21	79	118
CFSM	1.18	3.19	.90	3.02	2.63	1.37	.22	.06	.17	.15	2.15	2.00
IN.	1.36	3.56	1.04	3.48	2.73	1.59	.25	.07	.19	.18	2.48	2.23
AC-FT	25450	66430	19350	64940	51030	29580	4600	1290	3500	3270	46370	41700

CAL YR 1985 TOTAL 154777.3 MEAN 424 MAX 5560 MIN 5.6 CFSM 1.21 IN 16.45 AC-FT 307000
WTR YR 1986 TOTAL 180239.0 MEAN 494 MAX 3000 MIN 14 CFSM 1.41 IN 19.16 AC-FT 357500

02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
30...	1550	118	209	7.50	22.5	.90	5.6	66	58	62	120	23
JAN												
29...	1710	652	100	7.20	10.0	1.0	9.6	85	49	430	56	20
APR												
17...	1200	50	350	7.90	19.0	--	9.0	98	K19	120	--	--
JUL												
31...	1530	128	300	7.90	26.0	3.3	5.7	71	40	160	160	27

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT												
30...	23	42	4.3	3.8	6	.2	.10	104	103	100	122	6.1
JAN												
29...	20	19	2.1	3.3	11	.2	.20	39	38	36	44	4.4
APR												
17...	--	--	--	--	--	--	--	163	--	161	197	3.9
JUL												
31...	27	56	5.3	3.4	4	.1	.30	137	136	135	165	3.3

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
30...	1.0	9.3	<.10	6.5	210	130	.29	67	.22	.030	.25	.090
JAN												
29...	20	7.2	<.10	4.0	124	78	.17	218	--	.010	<.10	.010
APR												
17...	--	--	--	--	--	--	--	--	.09	.010	.10	.070
JUL												
31...	18	7.1	.10	5.1	221	180	.30	76	--	<.010	<.10	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT												
30...	.060	.08	--	.10	1.4	1.5	.110	.34	.090	.060	.18	140
JAN												
29...	.020	.03	--	.03	.99	1.0	.040	.12	.040	.020	.06	250
APR												
17...	.080	.10	.40	.03	.63	.70	.080	.25	.080	.070	.21	--
JUL												
31...	.060	.08	--	--	.87	.90	.070	.21	.050	.030	.09	80

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
30...	<1	11	<.5	<1	<1	<3	1	1100	<1	<4	75
JAN											
29...	<1	7	<.5	<1	<1	<3	2	600	1	<4	13
APR											
17...	--	--	--	--	--	--	--	--	--	--	--
JUL											
31...	<1	13	<.5	1	<1	<3	3	400	<5	5	46

02324000 STEINHATCHEE RIVER NEAR CROSS CITY, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
30...	<.1	<10	3	<1	<1	83	<6	6	7	2.2	43
JAN											
29...	<.1	<10	3	<1	<1	26	<6	13	2	3.5	50
APR											
17...	--	--	--	--	--	--	--	--	2	.27	50
JUL											
31...	<.1	<10	1	<1	<1	81	<6	<3	6	2.1	67

02324400 FENHOLLOWAY RIVER NEAR FOLEY, FL

LOCATION.--Lat 30°05'53", long 83°28'19", in NE¼ sec.36, T.4 S., R.8 E., Taylor County, Hydrologic Unit 03110102, near left bank at downstream side of bridge on U.S. Highway 27, 1.8 mi upstream from small tributary, 4 mi northeast of Foley, and 32 mi upstream from mouth.

DRAINAGE AREA.--60 mi^2 approximately.

PERIOD OF RECORD.--February to August 1955 (discharge measurements only); September 1955 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 53.59 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Estimated daily discharges during water year: Feb. 18-26. Records fair.

AVERAGE DISCHARGE.--31 years, 56.3 ft^3/s, 40,790 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,210 ft^3/s Sept. 12, 1964, gage height, 15.21 ft; minimum, 0.49 ft^3/s June 15, 1985; minimum gage height, 0.50 ft June 29,30, July 1, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 11	2300	304	8.81	Feb. 21	1500	*364	*9.64

Minimum discharge, 1.3 ft^3/s, May 13-19; minimum gage height, 0.98 ft, July 24, 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51	74	38	64	67	145	60	2.5	3.1	6.6	5.0	86
2	51	86	58	65	63	137	55	2.4	5.9	7.5	4.7	77
3	83	90	62	68	59	130	50	2.2	5.8	8.9	4.4	68
4	94	101	66	85	56	141	46	2.0	5.3	10	3.9	62
5	100	93	67	170	53	169	42	1.9	4.8	11	3.4	57
6	100	84	64	181	67	174	38	1.8	4.4	12	3.2	53
7	92	78	50	187	93	169	34	1.7	3.8	11	3.2	48
8	83	69	54	186	140	157	30	1.6	3.3	9.4	3.6	44
9	74	63	50	174	186	146	27	1.6	2.9	8.0	4.3	40
10	66	37	46	211	307	136	23	1.5	2.7	6.6	3.9	36
11	60	53	42	295	353	129	21	1.4	2.9	5.5	3.5	33
12	54	49	40	298	328	122	18	1.4	6.0	4.9	3.2	31
13	49	45	54	272	291	115	16	1.4	6.5	4.4	12	30
14	45	42	97	242	268	120	14	1.4	7.2	4.0	28	28
15	41	38	113	216	255	129	12	1.3	19	3.4	30	26
16	37	35	126	195	240	141	11	1.3	21	3.0	31	23
17	33	32	121	179	228	152	9.8	1.3	19	2.7	36	21
18	30	28	113	166	220	149	8.7	1.3	20	2.5	40	18
19	27	26	104	155	212	139	8.0	1.5	21	2.3	42	16
20	25	24	95	143	204	135	7.3	5.3	20	2.1	43	14
21	23	24	87	131	195	138	6.7	10	18	2.0	41	12
22	21	29	80	121	189	135	6.0	6.7	18	1.9	40	11
23	18	31	74	112	182	127	5.3	5.4	17	1.8	37	12
24	17	30	69	104	175	117	4.8	4.5	15	1.8	33	13
25	15	29	64	97	168	108	4.4	3.8	13	2.1	30	13
26	14	27	59	97	163	99	4.0	3.3	11	2.7	27	12
27	13	24	55	93	157	92	3.6	2.9	9.5	2.9	26	11
28	13	23	51	87	152	84	3.3	2.6	8.3	2.9	30	10
29	14	21	49	82	---	77	3.0	2.3	7.2	3.2	53	8.8
30	15	24	46	78	---	71	2.8	2.1	6.7	4.0	75	9.6
31	18	---	44	72	---	65	---	2.0	---	4.9	89	---
TOTAL	1376	1436	2145	4626	5071	3948	574.5	82.4	308.3	156.0	789.3	923.4
MEAN	44.4	47.9	69.2	149	181	127	19.2	2.66	10.3	5.03	25.5	30.8
MAX	100	101	126	298	353	174	60	10	21	12	89	86
MIN	13	21	38	64	53	65	2.8	1.3	2.7	1.8	3.2	8.8
CFSM	.74	.80	1.15	2.48	3.02	2.12	.32	.04	.17	.08	.43	.51
IN.	.85	.89	1.33	2.87	3.14	2.45	.36	.05	.19	.10	.49	.57
AC-FT	2730	2850	4250	9180	10060	7830	1140	163	612	309	1570	1830

CAL YR 1985 TOTAL 17238.86 MEAN 47.2 MAX 697 MIN .65 CFSM .79 IN 10.69 AC-FT 34190
WTR YR 1986 TOTAL 21435.90 MEAN 58.7 MAX 353 MIN 1.3 CFSM .98 IN 13.29 AC-FT 42520

02324500 FENHOLLOWAY RIVER AT FOLEY, FL

LOCATION.--Lat 30°03'55", long 83°34'29", in NE¼ sec.7, T.5 S., R.8 E., Taylor County, Hydrologic Unit 03110102, near center of span on downstream side of bridge of U.S. Highway 19, 1.6 mi west of Foley, 2.4 mi downstream from clarifier flume of the Buckeye Cellulose Corporation plant, 11.4 mi upstream from Spring Creek, and 24.4 mi upstream from mouth.

DRAINAGE AREA.--120 mi^2, approximately.

PERIOD OF RECORD.--September 1946 to current year.

REVISED RECORDS.--WSP 1905: Drainage area. WDR FL-77-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.85 ft above National Geodetic Vertical Datum of 1929. Prior to June 24, 1947, nonrecording gage and June 24, 1947 to Feb. 4, 1971, water-stage recorder, at site about 1.6 mi upstream at datum 4.51 ft higher.

REMARKS.--No estimated daily discharges. Records fair. Since Feb. 1, 1954, large ground-water withdrawals by cellulose plant upstream. Records include return flow from plant.

AVERAGE DISCHARGE.--40 years; 133 ft^3/s, 96,358 acre ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,810 ft^3/s Sept. 12, 1964, gage height, 18.52 ft; no flow Jan. 2-4, 1971, caused by diversion of flow into lagoon; minimum gage height, 6.40 ft Jan. 8, 9, 1950, at former site and datum. Maximum discharge, 1,120 ft^3/s Apr. 5, 1973, gage height 15.03; minimum discharge, 0.80 ft^3/s Aug. 16, 1972; minimum gage height, 8.96 ft July 11, 12, 1974, present site and datum.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 518 ft^3/s, Feb. 12, gage height, 13.97 ft; minimum 24 ft^3/s, Sept. 28, gage height, 9.08 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	153	127	196	194	294	176	73	72	58	73	246
2	164	174	156	201	179	285	167	71	68	62	67	243
3	190	177	186	204	171	277	156	69	66	63	69	230
4	213	206	186	223	166	282	147	68	66	60	71	209
5	233	216	190	285	160	297	141	68	66	65	66	192
6	227	205	183	320	188	306	137	69	63	61	69	177
7	224	202	174	344	249	306	126	72	64	63	65	163
8	213	212	169	345	289	299	117	71	67	65	63	150
9	201	196	164	334	324	288	112	70	71	62	62	135
10	188	188	160	361	388	280	108	66	71	60	61	119
11	179	175	153	426	474	271	99	67	76	66	61	128
12	166	167	149	488	514	263	99	69	65	62	64	120
13	161	160	173	500	498	252	96	68	66	61	128	119
14	150	151	232	471	468	257	94	67	65	62	73	117
15	143	142	267	433	444	263	90	63	59	70	96	111
16	139	136	284	390	422	275	79	61	61	68	105	107
17	129	128	287	358	405	283	84	66	62	63	111	110
18	123	124	282	334	393	282	86	66	63	65	130	106
19	122	120	275	318	379	275	82	84	61	66	138	103
20	118	116	268	303	368	270	81	93	64	65	145	97
21	117	116	254	290	358	274	80	73	61	64	166	92
22	113	123	243	279	343	275	79	66	61	61	147	88
23	107	123	236	266	341	269	77	64	61	73	142	83
24	99	124	224	254	333	260	71	66	59	66	130	68
25	99	123	210	247	324	248	70	65	62	64	121	68
26	96	121	200	244	316	238	72	65	60	66	117	55
27	96	117	191	234	309	225	71	63	61	78	109	32
28	93	117	182	222	302	216	70	64	55	73	123	26
29	87	114	175	215	---	203	71	69	54	71	174	45
30	68	125	168	209	---	192	72	67	59	67	213	57
31	91	---	162	199	---	185	---	69	---	72	238	---
TOTAL	4522	4551	6310	9493	9299	8190	3012	2132	1909	2022	3397	3596
MEAN	146	152	204	306	332	264	100	68.8	63.6	65.2	110	120
MAX	233	216	287	500	514	306	176	93	76	78	238	246
MIN	68	114	127	196	160	185	70	61	54	58	61	26
CFSM	1.22	1.27	1.70	2.55	2.77	2.20	.83	.57	.53	.54	.92	1.00
IN.	1.40	1.41	1.96	2.94	2.88	2.54	.93	.66	.59	.63	1.05	1.11
AC-FT	8970	9030	12520	18830	18440	16240	5970	4230	3790	4010	6740	7130

CAL YR 1985	TOTAL	52386	MEAN 144	MAX 949	MIN 51	CFSM 1.20	IN 16.24	AC-FT	103900
WTR YR 1986	TOTAL	58433	MEAN 160	MAX 514	MIN 26	CFSM 1.33	IN 18.11	AC-FT	115900

02326000 ECONFINA RIVER NEAR PERRY, FL.

LOCATION.--Lat 30°10'14", long 83°49'26", in NE¼ sec.4, T.4 S., R.5 E., Taylor County, Hydrologic Unit 03110102, on right bank 10 ft downstream from wooden bridge, 3.0 mi downstream from Natural Well Branch, 14 mi upstream from mouth, and 14.7 mi northwest of Perry.

DRAINAGE AREA.--190 mi^2.

PERIOD OF RECORD.--February 1950 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.35 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges during the year. Records fair.

AVERAGE DISCHARGE.--36 years, 143 ft^3/s, 9.81 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,540 ft^3/s Sept. 17, 1957, gage height, 12.78 ft; minimum, 2.3 ft^3/s July 8, 1955; minimum gage height, 1.87 ft Mar. 2,3, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1300 ft^3/s Feb. 11, gage height, 11.56 ft; minimum, 20 ft^3/s July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	387	162	232	194	583	202	37	26	25	24	83
2	119	430	170	231	183	540	183	36	26	26	23	85
3	115	431	169	223	172	498	166	35	25	25	23	88
4	109	424	167	221	162	432	151	34	25	24	23	87
5	103	411	168	252	185	490	137	34	25	24	22	87
6	102	395	170	259	459	470	125	33	25	24	23	89
7	100	369	168	259	590	440	115	32	24	24	24	85
8	99	339	162	264	717	414	106	32	24	24	23	78
9	95	312	155	266	909	392	98	31	24	24	23	73
10	90	286	147	306	1150	368	90	31	24	24	24	70
11	85	263	140	411	1270	344	83	30	24	23	26	65
12	81	241	134	453	1290	320	78	30	25	23	26	60
13	75	221	215	473	1280	297	73	29	26	23	35	58
14	70	202	392	488	1250	337	69	29	31	23	59	58
15	65	184	418	492	1250	379	65	29	34	22	82	55
16	60	167	438	486	1190	398	61	28	33	22	97	52
17	58	151	467	474	1130	434	58	28	31	22	102	51
18	54	138	480	458	1090	431	54	28	31	22	86	50
19	51	127	478	440	1030	411	51	29	30	21	71	49
20	49	118	465	415	979	402	50	31	29	21	66	47
21	47	117	446	388	932	405	50	31	29	21	69	45
22	50	119	421	361	885	390	50	31	30	21	82	45
23	47	114	395	336	855	370	48	31	29	23	85	46
24	45	112	368	311	813	357	46	30	29	24	84	48
25	43	110	338	288	773	342	44	29	28	25	78	46
26	41	108	309	279	729	324	42	28	28	25	72	44
27	42	107	284	267	682	304	41	28	28	25	69	43
28	55	104	265	249	632	283	40	27	27	25	71	41
29	56	101	247	232	---	262	39	27	26	25	74	40
30	59	122	229	219	---	240	38	26	25	25	77	38
31	155	---	214	206	---	220	---	26	---	25	79	---
TOTAL	2344	6710	8781	10239	22781	11925	2453	940	821	730	1722	1806
MEAN	75.6	224	283	330	814	385	81.8	30.3	27.4	23.5	55.5	60.2
MAX	155	431	480	492	1290	583	202	37	34	26	102	89
MIN	41	101	134	206	162	220	38	26	24	21	22	38
CFSM	.38	1.13	1.43	1.67	4.11	1.94	.41	.15	.14	.12	.28	.30
IN.	.44	1.26	1.65	1.92	4.28	2.24	.46	.18	.15	.14	.32	.34
AC-FT	4650	13310	17420	20310	45190	23650	4870	1860	1630	1450	3420	3580

CAL YR 1985	TOTAL	44234	MEAN 121	MAX 694	MIN 10	CFSM .61	IN 8.31	AC-FT 87740				
WTR YR 1986	TOTAL	71252	MEAN 195	MAX 1290	MIN 21	CFSM .99	IN 13.39	AC-FT 141300				

02326500 AUCILLA RIVER AT LAMONT, FL

LOCATION.--Lat 30°22'11", long 83°48'25", in NE¼ sec.27, T.1 S., R.5 E., Madison County, Hydrologic Unit 03110103, near left bank on downstream side of bridge on U.S. Highway 19, 0.6 mi southeast of Lamont, and 34 mi upstream from mouth.

DRAINAGE AREA.--747 mi^2.

PERIOD OF RECORD --February 1950 to September 1979; November 1983 to current year (gage heights and peak discharge only).

REVISED RECORDS.--WSP 1204, 1905: Drainage area. WSP 1504: 1953.

GAGE.--Water-stage recorder. Datum of gage is 42.90 ft above National Geodetic Vertical Datum of 1929, unadjusted.

REMARKS.--Pumpage above and below station for irrigation during dry seasons. Since Aug. 27, 1963, low-head rock and concrete dam 0.6 mi downstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Apr. 8, 1973, gage height, 16.57 ft, river dry at gage June 13-16, 1955.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 6,780 ft^3/s Feb. 16, gage height, 13 99 ft; minimum daily gage height 4.95 ft, July 21.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.34	7.42	8.38	9.91	8.92	10.54	9.30	5.93	5.28	5.36	5.24	8.56
2	6.31	7.93	9.28	9.96	8.84	10.39	9.17	5.87	5.34	5.39	5.14	8.46
3	6.46	8.06	10.43	9.91	8.73	10.28	9.03	5.80	5.31	5.32	5.07	8.37
4	6.46	8.17	10.83	9.87	8.62	10.22	8.88	5.73	5.28	5.23	5.04	8.33
5	6.35	8.14	10.84	9.91	8.63	10.19	8.72	5.68	5.27	5.16	5.27	8.38
6	6.27	8.03	10.73	9.90	9.25	10.12	8.56	5.63	5.32	5.13	5.40	8.45
7	6.19	7.94	10.57	9.87	9.81	10.05	8.39	5.58	5.39	5.20	5.47	8.39
8	6.12	8.21	10.42	9.83	10.14	9.95	8.21	5.53	5.43	5.14	5.40	8.26
9	6.05	8.66	10.28	9.77	10.62	9.86	8.03	5.48	5.42	5.09	5.29	8.12
10	6.00	8.86	10.15	9.84	11.49	9.76	7.84	5.43	5.38	5.10	5.22	8.00
11	5.97	8.86	10.04	10.08	12.31	9.68	7.68	5.39	5.40	5.11	5.29	8.01
12	5.94	8.77	9.97	10.21	12.97	9.59	7.53	5.36	5.52	5.09	5.36	8.02
13	5.87	8.62	10.65	10.25	13.33	9.50	7.42	5.35	5.59	5.36	5.98	8.31
14	5.81	8.44	11.71	10.26	13.58	9.77	7.30	5.32	5.82	5.48	6.75	8.19
15	5.75	8.24	11.79	10.24	13.87	10.06	7.17	5.31	5.97	5.29	6.91	7.99
16	5.70	8.03	11.68	10.23	13.97	10.13	7.06	5.29	6.06	5.16	6.77	7.82
17	5.65	7.86	11.56	10.28	13.88	10.14	6.94	5.26	6.03	5.11	6.57	7.65
18	5.59	7.68	11.60	10.36	13.67	10.13	6.84	5.23	5.94	5.07	6.44	7.49
19	5.56	7.52	11.89	10.38	13.34	10.09	6.75	5.31	5.85	5.02	6.38	7.35
20	5.53	7.39	11.99	10.33	12.97	10.08	6.66	5.69	5.77	4.97	6.33	7.21
21	5.50	7.38	11.89	10.22	12.58	10.09	6.60	5.92	5.74	4.95	6.42	7.07
22	5.47	7.29	11.68	10.09	12.23	10.07	6.53	5.75	5.72	5.04	6.59	6.94
23	5.46	7.31	11.44	9.91	11.93	10.03	6.48	5.56	5.64	5.28	6.68	6.85
24	5.46	7.30	11.21	9.83	11.61	9.99	6.41	5.45	5.54	5.88	6.67	6.73
25	5.44	7.29	10.98	9.70	11.33	9.94	6.33	5.37	5.46	6.02	6.54	6.63
26	5.41	7.29	10.76	9.62	11.08	9.88	6.26	5.31	5.40	5.80	6.64	6.53
27	5.42	7.26	10.57	9.51	10.87	9.81	6.20	5.27	5.36	5.63	7.19	6.44
28	5.56	7.22	10.40	9.39	10.69	9.73	6.13	5.23	5.32	5.79	7.48	6.36
29	5.63	7.19	10.25	9.28	---	9.63	6.06	5.23	5.28	5.73	7.69	6.26
30	5.68	7.55	10.11	9.16	---	9.53	6.00	5.20	5.24	5.54	8.24	6.25
31	6.20	---	9.98	9.04	---	9.42	---	5.18	---	5.37	8.58	---
TOTAL	181.15	235.91	334.06	307.14	321.26	308.65	220.48	169.64	166.07	164.81	194.04	227.42
MEAN	5.84	7.86	10.78	9.91	11.47	9.96	7.35	5.47	5.54	5.32	6.26	7.58
MAX	6.46	8.86	11.99	10.38	13.97	10.54	9.30	5.93	6.06	6.02	8.58	8.56
MIN	5.41	7.19	8.38	9.04	8.62	9.42	6.00	5.18	5.24	4.95	5.04	6.25

CAL YR 1985 TOTAL 2398.36 MEAN 6.57 MAX 11.99 MIN 4.73
WTR YR 1986 TOTAL 2830.63 MEAN 7.76 MAX 13.97 MIN 4.95

02326512 AUCILLA RIVER NEAR SCANLON, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°13'52", long 83°55'08", in SW¼ sec.10, T.3 S., R.4 E., Taylor County, Hydrologic Unit 03110103, on left bank, 3 mi west of Cabbage Grove, 6.9 mi north of Scanlon, 12 mi southwest of Lamont and 14 mi upstream from mouth.

DRAINAGE AREA.--805 mi^2.

WATER-DISCHARGE RECORD

PERIOD OF RECORD.--March 1950 to November 1957, crest-stage partial-record station; May 1965, May 1967 (one discharge measurement made each water year); August 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3.14 ft above National Geodetic Vertical Datum of 1929, unadjusted. February 1950 to November 1957, crest-stage gage at same site at present datum. August 30, 1976 to April 24, 1982, water-stage recorder at same site and datum. April 25, 1982 to October 24, 1984, nonrecording gage.

REMARKS.--No estimated daily discharges during water year. Records fair.

AVERAGE DISCHARGE.--10 years, 583 ft^3/s, 9.84 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,460 ft^3/s Apr. 8, 1984, gage height, 20.47 ft present datum from floodmark, from rating extended above 6,000 ft^3/s on basis of velocity-area study; minimum, 31 ft^3/s Oct. 10, 1981; minimum gage height, 2.76 ft, June 14, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of April 9, 1973, reached a stage of about 23.5 ft, from floodmarks, (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,360 ft^3/s Feb. 18, gage height, 19.97 ft; minimum, 46 ft^3/s July 21, 22 gage height, 2.92 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	194	792	634	1700	853	2710	1010	128	58	57	66	649
2	191	903	854	1650	810	2430	950	118	60	63	60	665
3	212	874	1040	1500	771	2160	891	108	63	65	55	653
4	209	843	1400	1420	735	1900	833	100	61	60	52	640
5	190	804	1710	1450	736	1730	776	93	59	56	50	670
6	176	752	2040	1400	1050	1650	720	89	58	53	61	655
7	167	694	2180	1370	1180	1590	666	85	60	53	68	660
8	159	657	2140	1350	1350	1530	618	80	63	54	69	642
9	149	707	2010	1310	1690	1470	570	76	65	52	65	605
10	140	799	1810	1350	2530	1400	518	72	64	50	66	568
11	135	863	1670	1490	3090	1330	475	68	62	51	63	540
12	130	879	1610	1500	3950	1260	439	66	66	50	64	538
13	123	852	1740	1530	4820	1200	409	65	73	50	116	566
14	114	798	2220	1550	5430	130	380	65	86	62	191	590
15	106	728	2750	1550	5780	1420	352	63	109	68	264	565
16	99	654	3500	1540	6040	1490	325	62	128	61	268	520
17	92	584	3740	1520	6200	1540	298	60	136	54	241	481
18	88	523	3680	1520	6300	1550	276	59	129	51	215	444
19	83	474	3590	1540	6220	1540	257	63	114	49	198	414
20	80	434	3650	1560	6020	1530	242	90	103	48	201	381
21	78	449	3850	1550	5750	1520	239	123	99	47	211	349
22	75	518	3980	1520	5430	1480	221	121	95	46	235	329
23	73	419	3920	1460	5110	1450	208	99	90	52	238	322
24	71	406	3700	1380	4720	1420	199	86	82	70	243	297
25	70	399	3390	1280	4300	1390	188	78	76	121	230	270
26	69	399	3070	1220	3830	1350	179	72	70	123	228	251
27	71	393	2770	1150	3390	1310	171	68	66	93	268	234
28	94	383	2510	1070	3010	1260	164	65	63	91	349	220
29	90	376	2260	1010	---	1200	154	64	61	100	414	208
30	119	400	2010	952	---	1140	140	61	59	92	501	200
31	303	---	1770	900	---	1080	---	59	---	77	582	---
TOTAL	3950	18756	77198	43292	101095	47330	12866	2506	2378	2019	5932	14128
MEAN	127	625	2490	1397	3611	1527	429	80.8	79.3	65.1	191	471
MAX	303	903	3980	1700	6300	2710	1010	128	136	123	582	670
MIN	69	376	634	900	735	1080	140	59	58	46	50	200
CFSM	.16	.78	3.09	1.74	4.49	1.90	.53	.10	.10	.08	.24	.59
IN.	.18	.87	3.57	2.00	4.67	2.19	.59	.12	.11	.09	.27	.65
AC-FT	7830	37200	153100	85870	200500	93880	25520	4970	4720	4000	11770	28020

CAL YR 1985 TOTAL 153528 MEAN 421 MAX 3980 MIN 34 CFSM .52 IN 7.09 AC-FT 304500
WTR YR 1986 TOTAL 331452 MEAN 908 MAX 6300 MIN 46 CFSM 1.13 IN 15.32 AC-FT 657400

02326512 AUCILLA RIVER NEAR SCANLON, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
01...	1300	872	92	7.40	21.0	2.1	6.0	69	170	540	45	11
JAN												
30...	1030	953	50	6.70	8.0	1.1	10.0	84	K16	70	21	12
APR												
29...	1400	154	170	7.50	20.5	--	9.2	103	K20	K23	--	--
AUG												
14...	1300	192	252	8.00	24.5	1.5	6.5	78	60	62	130	16

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
NOV												
01...	11	14	2.5	2.4	10	.2	.40	36	34	34	42	2.7
JAN												
30...	12	6.0	1.5	2.8	22	.6	.40	12	12	9.3	11	3.5
APR												
29...	--	--	--	--	--	--	--	72	--	70	86	4.3
AUG												
14...	16	41	7.0	2.9	5	.1	.50	118	122	116	141	2.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV											
01...	13	5.6	<.10	4.7	87	64	.12	205	.010	<.10	.020
JAN											
30...	13	6.8	<.10	2.4	62	39	.08	160	<.010	<.10	.030
APR											
29...	--	--	--	--	--	--	--	--	.010	<.10	.060
AUG											
14...	10	4.9	.20	6.5	151	140	.21	78	<.010	<.10	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV											
01...	.020	.03	.03	.78	.80	.080	.25	.040	.030	.09	160
JAN											
30...	.030	.04	--	.67	.70	.030	.09	.020	.010	.03	260
APR											
29...	.070	.09	.03	.64	.70	.070	.21	.060	.040	.12	--
AUG											
14...	.020	.03	--	.37	.40	.090	.28	.070	.070	.21	40

02326512 AUCILLA RIVER NEAR SCANLON, FL--Continued

WATER-QUALITY RECORDS

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV 01...	<1	10	<.5	<1	<1	<3	<1	470	<1	<4	23
JAN 30...	<1	11	<.5	<1	<1	<3	1	500	3	<4	22
APR 29...	--	--	--	--	--	--	--	--	--	--	--
AUG 14. .	<1	14	<.5	<1	<1	<3	<1	320	<5	10	23

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 01...	<.1	<10	<1	<1	<1	14	<6	11	15	35	33
JAN 30...	<.1	<10	2	<1	<1	11	<6	9	1	2.6	100
APR 29...	-	--	--	--	--	--	--	--	2	.83	50
AUG 14...	<.1	<10	2	<1	<1	40	<6	6	4	2.1	55

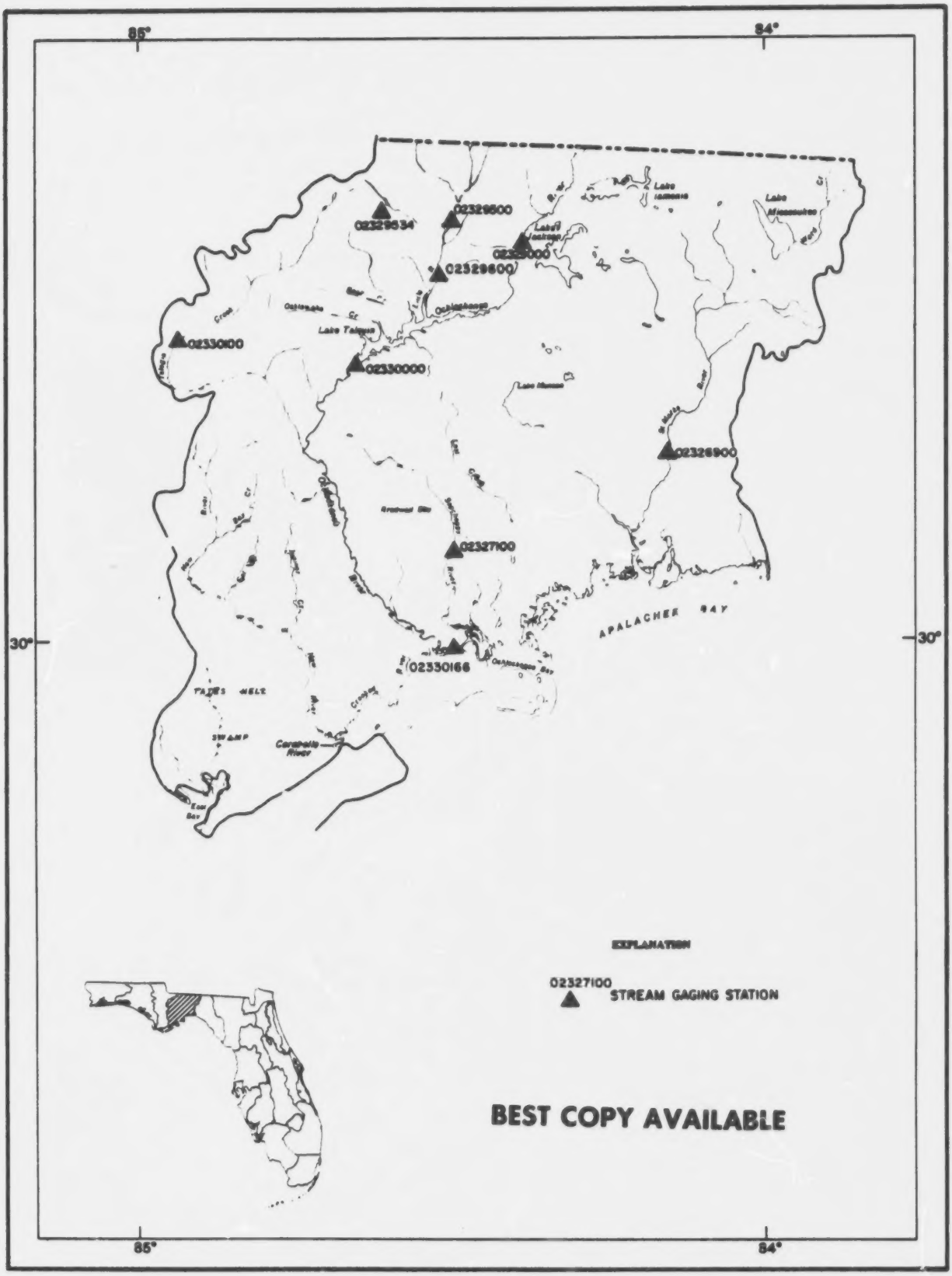

Figure 14. Location of stream gaging stations in the St. Marks, and Ochlockonee River basins.

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02326900 ST. MARKS RIVER NEAR NEWPORT, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°16'00", long 84°09'00", in SE¼ sec.32, T.2 S., R.2 E., Wakulla County, Hydrologic Unit 03120001, on left bank 0.9 mi downstream from Rhodes Springs, 6 mi north of Newport, 11 mi upstream from Wakulla River, and 14 mi upstream from mouth.

DRAINAGE AREA.--535 mi^2 including 290 mi^2 of Lake Miccosukee, which contributes at high stages to the St. Marks River.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1956 to September 1976. October 1976 to September 1977 (gage heights only); October 1977 to current year.

REVISED RECORDS.--WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3.53 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated discharges. Records poor.

AVERAGE DISCHARGE.--30 years (water years 1957-76, 1978-86), 684 ft^3/s, 495,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft^3/s Apr. 7, 1973, gage height, 11.81 ft; minimum, 310 ft^3/s Apr. 25, 1964, Oct. 4-6, 1968; minimum gage height, 4.20 ft Mar. 17, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,390 ft^3/s Feb. 12, gage height, 8.39 ft; minimum daily, 598 ft^3/s Sept. 30, gage height, 5.20 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	683	1290	849	1030	886	1500	947	702	642	638	612	722
2	678	1380	1040	1030	876	1420	926	699	642	636	608	733
3	671	1500	1180	1020	866	1360	910	693	650	635	612	752
4	668	1410	1290	1040	859	1310	896	689	656	630	606	754
5	663	1240	1300	1080	886	1280	882	686	647	626	604	739
6	653	1130	1190	1070	1050	1240	867	684	643	626	604	721
7	647	1060	1090	1050	1170	1200	856	684	642	626	606	711
8	641	1000	1020	1030	1300	1170	848	682	643	626	604	701
9	637	946	975	1010	1600	1150	837	678	648	622	605	689
10	633	901	937	1050	1960	1130	825	674	646	618	603	681
11	629	861	912	1140	2280	1100	817	670	651	618	609	673
12	627	831	982	1140	2390	1080	808	667	656	616	613	669
13	624	807	1410	1160	2240	1070	802	665	651	615	678	667
14	622	787	1720	1170	2130	1180	794	661	646	611	660	656
15	618	771	1810	1140	2070	1260	787	658	650	608	653	652
16	616	757	1860	1090	1990	1280	777	654	653	606	659	648
17	613	746	1700	1050	1920	1330	765	654	657	612	653	642
18	609	734	1530	1030	1930	1300	758	655	697	604	637	635
19	608	726	1410	1020	1970	1260	751	667	665	601	636	631
20	608	724	1320	996	2000	1220	748	683	664	599	652	627
21	613	776	1250	981	2010	1200	744	681	666	599	771	623
22	614	903	1200	971	2000	1170	738	672	664	601	778	621
23	611	765	1170	962	1970	1150	732	665	659	619	729	619
24	609	766	1140	949	1910	1130	726	660	654	615	694	619
25	606	781	1100	941	1820	1110	721	655	650	612	672	615
26	606	808	1060	943	1730	1070	716	654	645	611	664	612
27	609	811	1050	929	1660	1040	715	650	642	619	669	609
28	621	803	1030	917	1580	1020	713	649	642	622	668	604
29	623	794	1020	913	---	1000	709	646	638	620	706	600
30	655	801	1000	906	---	981	705	646	637	619	739	598
31	915	---	994	895	---	966	---	644	---	619	727	---
TOTAL	19830	27609	37539	31653	47053	36677	23820	20727	19546	19129	20330	19823
MEAN	640	920	1211	1021	1680	1183	794	669	652	617	656	661
MAX	915	1500	1860	1170	2390	1500	947	702	697	638	778	754
MIN	606	724	849	895	859	966	705	644	637	599	603	598
CFSM	1.20	1.72	2.26	1.91	3.14	2.21	1.48	1.25	1.22	1.15	1.23	1.24
IN.	1.38	1.92	2.61	2.20	3.27	2.55	1.66	1.44	1.36	1.33	1.41	1.38
AC-FT	39330	54760	74460	62780	93330	72750	47250	41110	38770	37940	40320	39320

CAL YR 1985 TOTAL 231302 MEAN 634 MAX 1860 MIN 345 CFSM 1.19 IN 16.08 AC-FT 458800
WTR YR 1986 TOTAL 323736 MEAN 887 MAX 2390 MIN 598 CFSM 1.66 IN 22.51 AC-FT 642100

02326900 ST. MARKS RIVER NEAR NEWPORT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
04...	1630	1370	148	7.60	19.0	2.1	5.0	54	33	74	73	13
DEC												
11...	1415	905	190	7.80	19.0	2.2	5.7	61	K24	K15	98	14
FEB												
11...	1200	2300	110	7.30	17.0	1.5	6.1	64	63	140	52	16
APR												
18...	1130	758	215	9.20	20.0	--	8.0	88	K8	90	--	--
JUN												
16...	1415	650	260	8.30	22.0	1.0	7.5	87	57	70	130	12
AUG												
19...	1645	636	--	--	21.0	1.1	5.7	65	52	84	130	11

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
NOV											
04...	13	22	4.3	2.9	8	.2	.40	62	58	60	73
DEC											
11...	14	30	5.1	3.1	7	.1	.60	83	83	82	100
FEB											
11...	16	16	3.0	2.4	9	2	.50	37	42	36	44
APR											
18...	--	--	--	--	--	--	--	102	--	100	122
JUN											
16...	12	39	7.8	3.6	6	.1	.60	120	121	118	144
AUG											
19...	11	40	7.7	3.5	5	.1	.50	--	121	--	--

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV											
04...	2.9	13	5.7	<.10	9.2	113	94	.15	418	<.010	<.10
DEC											
11...	2.5	12	6.1	.10	10	131	120	.18	320	<.010	<.10
FEB											
11...	3.5	11	4.5	<.10	5.4	76	65	.10	472	<.010	<.10
APR											
18...	1.2	--	--	--	--	--	--	--	--	<.010	<.10
JUN											
16...	1.1	9.9	5.1	.20	12	151	150	.21	265	<.010	.13
AUG											
19...	--	10	5.4	.20	13	145	150	.20	250	<.010	.14

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV											
04...	.020	.040	.05	.58	.60	.040	.12	.030	.020	.06	130
DEC											
11...	.040	.040	.05	.36	.40	.040	.12	.030	.030	.09	60
FEB											
11...	.030	.030	.04	.57	.60	.030	.09	.020	.020	.06	--
APR											
18...	<.010	.010	.01	--	.20	.040	.12	.030	.030	.09	--
JUN											
16...	<.010	.020	.03	--	.20	.050	.15	.040	.030	.09	<10
AUG											
19...	.020	.010	.01	--	<.20	.040	.12	.040	.030	.09	--

02326900 ST. MARKS RIVER NEAR NEWPORT, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV											
04...	<1	10	<.5	<1	<1	<3	<1	230	<1	4	10
DEC											
11...	<1	15	<.5	<1	<1	<3	<1	190	<1	<4	15
FEB											
11...	--	--	--	--	--	--	--	--	--	--	--
APR											
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
16...	<1	12	<.5	<1	<1	<3	2	12	<5	6	5
AUG											
19...	--	--	--	--	--	--	--	--	--	--	--

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDIMENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV											
04...	<.1	<10	<1	<1	<1	47	<6	8	7	26	57
DEC											
11...	<.1	<10	2	<1	<1	56	<6	<3	7	17	43
FEB											
11...	--	--	--	--	--	--	--	--	5	31	--
APR											
18...	--	--	--	--	--	--	--	--	2	4.1	50
JUN											
16...	<.1	<10	2	<1	<1	82	<7	15	3	5.3	67
AUG											
19...	--	--	--	--	--	--	--	--	7	12	79

02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL
(Hydrologic bench-mark station)

LOCATION.--Lat 30°07'45", long 84°29'40" in NW¼ sec.24, T.4 S., R.3 W., Wakulla County, Hydrologic Unit 03120003, Apalachicola National Forest, near left bank on downstream side of bridge on U.S. Forest Road 346A, 4.7 mi north of Sopchoppy, 5.2 mi upstream from Duval Branch, and 24 mi upstream from mouth.

DRAINAGE AREA.--102 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Water years 1961-64 (annual maximum); June 1964 to current year.

REVISED RECORDS.--WSP 1905, WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Jan. 27, 1961 to June 3, 1964, nonrecording gage and crest-stage gage at same site at datum 9.63 ft higher.

REMARKS.--No estimated daily discharge. Records good.

AVERAGE DISCHARGE.--22 years (water years 1965-86), 197 ft^3/s, 26.23 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,260 ft^3/s July 31, 1975, gage height, 34.47 ft, from rating curve extended above 3,500 ft^3/s by velocity-area study; minimum, 1.0 ft^3/s June 29 to July 3, 1968, Nov. 19, 1983, May 5-8, 1985; minimum gage height, 7.94 ft June 4, 5, 1965.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0700	1,360	22.34	Feb. 11	2100	*2,790	*28.86
Dec. 15	1100	2,190	26.69				

Minimum discharge, 1.4 ft^3/s May 26 to June 1, gage height, 8.17 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	1160	457	234	74	176	44	2.7	1.5	3.8	35	501
2	16	1340	504	273	67	149	37	2.7	2.4	3.5	30	440
3	14	1180	470	288	61	128	30	2.5	2.4	4.4	48	369
4	12	951	428	300	55	120	24	2.4	1.8	5.7	52	368
5	11	711	370	369	77	118	20	2.3	2.5	8.8	56	389
6	9.1	523	317	347	350	109	17	2.3	3.1	17	50	353
7	8.0	388	269	327	596	99	15	2.3	2.3	22	59	279
8	7.0	302	230	302	764	87	13	2.2	1.9	17	66	224
9	6.4	238	198	269	1120	76	11	2.2	1.8	13	75	189
10	5.7	189	172	314	2090	68	9.5	2.0	1.8	10	125	167
11	5.2	151	150	478	2710	61	8.3	1.9	2.8	9.7	103	137
12	5.0	122	288	533	2690	55	7.4	1.8	2.8	10	95	112
13	4.6	99	1120	515	2200	51	6.6	1.8	1.9	9.3	381	95
14	4.3	81	1870	443	1490	172	6.1	1.8	2.9	8.2	389	75
15	4.1	68	2150	377	1040	282	5.4	1.8	5.7	7.1	429	71
16	3.9	57	1800	324	770	311	5.0	1.8	11	6.2	405	58
17	3.7	49	1260	281	604	321	4.6	1.7	22	5.5	369	48
18	3.6	41	861	249	587	288	4.3	1.7	10	4.7	294	39
19	3.5	35	637	227	566	253	4.0	2.5	28	4.0	265	31
20	3.4	31	501	203	525	243	3.9	2.9	31	3.4	354	25
21	5.4	77	403	179	463	256	3.8	2.3	18	2.8	370	19
22	5.0	612	334	157	399	235	3.7	1.8	13	2.8	430	16
23	4.4	983	281	138	397	208	3.7	1.7	11	3.1	342	14
24	3.8	1110	240	122	362	180	3.5	1.6	8.8	3.2	278	12
25	3.5	967	211	108	319	153	3.5	1.5	6.8	2.9	219	9.8
26	3.4	787	187	114	277	131	3.4	1.5	5.4	11	179	8.4
27	3.9	610	164	116	238	111	3.3	1.5	4.4	46	150	7.3
28	7.0	490	145	109	205	94	3.1	1.5	6.3	63	122	6.3
29	13	401	138	101	---	78	2.8	1.5	6.5	68	224	5.5
30	62	375	131	92	---	64	2.7	1.5	4.7	58	360	4.9
31	401	---	128	82	---	53	---	1.5	---	46	479	---
TOTAL	660.9	14108	16414	7971	21096	4730	309.6	61.3	224.5	480.1	6833	4073.2
MEAN	21.3	470	529	257	753	153	10.3	1.98	7.48	15.5	220	136
MAX	401	1340	2150	533	2710	321	44	2.9	31	68	479	501
MIN	3.4	31	128	82	55	51	2.7	1.5	1.5	2.8	30	4.9
CFSM	.21	4.61	5.19	2.52	7.38	1.50	.10	.02	.07	.15	2.16	1.33
IN.	.24	5.15	5.99	2.91	7.69	1.73	.11	.02	.08	.18	2.49	1.49
AC-FT	1310	27980	32560	15810	41840	9380	614	122	445	952	13550	8080

CAL YR 1985 TOTAL 76066.7 MEAN 208 MAX 3230 MIN 1.0 CFSM 2.04 IN 27.74 AC-FT 150900
WTR YR 1986 TOTAL 76961.6 MEAN 211 MAX 2710 MIN 1.5 CFSM 2.07 IN 28.07 AC-FT 152700

02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1964 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 31...	1330	407	55	4.10	21.0	4.4	7.0	81	1200	400	8	7
JAN 31...	1420	82	34	4.60	8.5	1.5	10.4	88	<1	<1	8	7
APR 28...	1530	3.0	222	7.70	25.0	--	7.4	90	K17	>870	--	--
AUG 01...	1700	32	49	4.80	29.0	--	6.1	80	53	31	--	--

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	ACIDITY (MG/L AS H)	ACIDITY (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)
OCT 31...	7	.3	15	2.1	.80	1.9	34	.3	.20	<1	<1.0
JAN 31...	7	--	--	2.5	.40	2.2	--	.4	<.10	<1	<1.0
APR 28...	--	--	--	--	--	--	--	--	--	105	--
AUG 01...	--	--	--	--	--	--	--	--	--	1	--

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT 31...	<1.0	1.2	151	16	4.6	<.10	4.6	63	32	.09	69
JAN 31...	<1.0	1.2	48	18	5.9	<.10	4.5	63	--	.09	14
APR 28...	105	128	4.1	--	--	--	--	--	--	--	--
AUG 01...	<1.0	1.2	30	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT 31...	.010	<.10	.050	.050	.06	.03	.85	.90	.040	.12	.020
JAN 31...	.010	<.10	.050	--	1.7	.03	.55	.60	.020	.06	.020
APR 28...	<.010	<.10	.040	.050	.06	--	.36	.40	.070	.21	.060
AUG 01...	<.010	<.10	<.010	.020	.03	--	--	.90	.070	.21	.040

02327100 SOPCHOPPY RIVER NEAR SOPCHOPPY, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
OCT											
31...	.020	.06	430	<1	7	<.5	<1	<1	<3	<1	360
JAN											
31...	<.050	--	410	<1	6	<.5	<1	<1	<3	2	320
APR											
28...	.040	.12	--	--	--	--	--	--	--	--	--
AUG											
01...	.020	.06	--	--	--	--	--	--	--	--	--

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)
OCT											
31...	<1	<4	9	<.1	<10	1	--	<1	7	<6	12
JAN											
31...	3	<4	3	<.1	<10	2	<1	<1	7	<6	5
APR											
28...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	--	--	--	--	--	--	--	--	--	--	--

DATE	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT											
31...	--	--	--	--	--	--	--	--	15	16	27
JAN											
31...	--	--	--	--	--	--	--	--	1	.22	100
APR											
28...	.6	<.8	1.3	<.6	1.2	<.6	.31	.21	<1	--	<1
AUG											
01...	--	--	--	--	--	--	--	--	5	.43	60

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°33'14", long 84°23'03", in SE¼ sec.24, T.2 N., R.2 W., Leon County, Hydrologic Unit 03120003, near left bank on downstream side of downstream bridge on divided U.S. Highway 27, 0.8 mi upstream from Seaboard Air Line Railroad bridge, 4.0 mi downstream from Mill Creek, 5.0 mi southeast of Havana, and 94 mi upstream from mouth.

DRAINAGE AREA.--1,140 mi^2, approximately. At site used prior to January 1929, 1,220 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1926 to current year. June 1926 to December 1929 (published as "at Ochlockonee"). Records published for both sites December 1928 to December 1929.

REVISED RECORDS.--WSP 822: 1929 (M). WSP 1504: 1928. WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 59.36 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 1, 1930, nonrecording gage at site about 10 mi downstream at datum 0.36 ft lower. Dec. 12, 1928, to Nov. 17, 1963, nonrecording gage at site 100 ft upstream at present datum. Nov. 18, 1963 to Nov. 15, 1977, nonrecording gage at same site and datum.

REMARKS.--No estimated discharges during year. Records good.

AVERAGE DISCHARGE.--60 years, 1,051 ft^3/s, 12.52 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,900 ft^3/s Apr. 4, 1948, gage height, 35.08 ft; minimum, 17 ft^3/s Oct. 23-28, Nov. 1, 1954; minimum gage height, 10.75 ft Oct. 31, Nov. 1, 3, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 33,100 ft^3/s Feb. 13, gage height, 33.13 ft; minimum, 52 ft^3/s, July 23, gage height, 11.55 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	171	1030	4830	1880	1590	3670	1330	275	105	163	178	327
2	178	1290	4420	1980	1530	3260	1230	258	106	145	190	382
3	242	2120	3920	2110	1460	2910	1140	242	112	134	182	408
4	253	4720	3640	2330	1410	2630	1050	227	117	123	161	384
5	241	5780	3470	2730	1430	2430	976	215	108	115	160	440
6	223	5090	3330	3090	2280	2270	905	206	96	113	166	467
7	203	4200	3220	3420	3150	2120	841	196	89	106	172	457
8	189	3440	3090	3680	4410	2000	782	186	86	97	243	411
9	170	2850	2910	3680	7930	1880	727	177	82	90	315	365
10	160	2340	2650	3890	13400	1780	677	169	80	84	351	359
11	155	1950	2400	4410	21700	1690	631	162	79	80	335	377
12	147	1610	2340	4610	31600	1610	592	154	98	77	279	359
13	138	1330	3430	5480	32700	1550	564	148	99	75	236	321
14	130	1130	4670	6460	28900	1790	543	141	124	81	209	286
15	123	991	6340	6870	21400	2020	533	134	237	81	211	279
16	116	895	7670	6580	15100	2050	519	130	323	77	263	266
17	111	828	7990	5810	11300	2220	496	126	338	74	340	241
18	107	775	7590	5030	9060	2510	471	121	364	80	385	221
19	102	732	6880	4290	7410	2600	448	124	415	72	402	203
20	101	698	6130	3640	6280	2560	426	136	465	64	374	185
21	98	729	5300	3220	5680	2520	408	156	516	60	350	169
22	95	1460	4490	2890	5300	2440	398	183	490	56	374	155
23	93	1900	3780	2570	4940	2340	391	186	419	57	387	143
24	95	3310	3310	2350	4560	2220	401	168	382	76	372	134
25	107	7690	2960	2170	4430	2090	407	148	364	73	337	130
26	116	10900	2600	2060	4460	1960	389	133	335	72	307	125
27	123	10800	2340	1940	4400	1840	364	121	285	82	287	118
28	150	9060	2140	1820	4120	1740	339	111	237	104	249	111
29	185	7190	2000	1750	---	1640	316	104	203	123	243	103
30	279	5740	1880	1700	---	1530	295	100	179	162	271	98
31	598	---	1810	1650	---	1420	---	95	---	165	285	---
TOTAL	5199	102578	123530	106090	261930	67290	18589	5032	6933	2961	8614	8024
MEAN	168	3419	3985	3422	9355	2171	620	162	231	95.5	278	267
MAX	598	10900	7990	6870	32700	3670	1330	275	516	165	402	467
MIN	93	598	1810	1650	1410	1420	295	95	79	56	160	98
CFSM	.15	3.00	3.50	3.00	8.21	1.90	.54	.14	.20	.08	.24	.23
IN.	.17	3.35	4.03	3.46	8.55	2.20	.61	.18	.23	.10	.28	.26
AC-FT	10310	203500	245000	210400	519500	133500	36870	9980	13750	5870	17090	15920

CAL YR 1985 TOTAL 395779 MEAN 1084 MAX 10900 MIN 74 CFSM .95 IN 12.91 AC-FT 785000
WTR YR 1986 TOTAL 716770 MEAN 1964 MAX 32700 MIN 56 CFSM 1.72 IN 23.39 AC-FT 1422000

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.90	18.50	25.65	21.76	20.85	24.87	19.88	13.91	12.26	12.89	12.86	13.94
2	12.98	19.58	25.40	22.04	20.63	24.44	19.50	13.77	12.28	12.70	12.96	14.36
3	13.59	21.99	25.06	22.39	20 41	23.97	19.00	13.63	12.36	12.58	12.85	14.56
4	13.69	25.29	24.86	22.96	20.20	23.58	18.69	13.50	12.41	12.45	12.60	14.38
5	13.58	26.01	24.69	23.72	20.26	23.21	18.32	13.39	12.30	12.36	12.56	14.80
6	13.43	25.59	24.54	24.21	22.63	22.80	17.97	13.30	12.17	12.33	12.60	15.00
7	13.23	24.97	24.39	24.63	24.30	22.42	17.63	13.20	12.08	12.25	12.63	14.92
8	13.09	24.29	24.22	24.89	25.35	22.08	17.31	13.11	12.03	12.14	13.29	14.58
9	12.90	23.51	23.97	24.89	27.14	21.77	17.01	13.02	11.99	12.04	13.87	14.23
10	12.79	22.80	23.59	25.04	29.07	21.46	16.71	12.94	11.96	11.97	14.13	14.19
11	12.74	21.58	23.13	25.39	31.12	21.18	16.44	12.86	11.94	11.92	14.00	14.33
12	12.65	20.52	22.96	25.52	32.89	20.93	16.20	12.78	12.19	11.88	13.54	14.18
13	12.55	19.54	24.60	26.02	33.07	20.70	16.02	12.71	12.20	11.86	13.17	13.89
14	12.47	18.69	25.54	26.52	32.47	21.47	15.90	12.64	12.49	11.92	12.92	13.63
15	12.39	18.03	26.45	26.71	31.08	22.14	15.83	12.57	13.62	11.92	12.94	13.57
16	12.31	17.54	27.05	26.58	29.59	22.22	15.74	12.52	14.36	11.87	13.40	13.47
17	12.25	17.19	27.18	26.19	28.43	22.68	15.58	12.48	14.48	11.84	14.04	13.28
18	12.20	16.90	27.02	25.77	27.61	23.37	15.40	12.43	14.69	11.91	14.39	13.11
19	12.14	16.67	26.71	25.31	26.94	23.52	15.24	12.45	15.07	11.80	14.51	12.95
20	12.13	16.47	26.36	24.85	26.43	23.47	15.09	12.59	15.44	11.71	14.30	12.79
21	12.09	16.84	25.92	24.39	26.13	23.40	14.95	12.82	15.80	11.65	14.12	12.64
22	12.06	19.99	25.44	23.94	25.93	23.24	14.87	13.10	15.61	11.61	14.30	12.51
23	12.04	21.44	24.95	23.47	25.72	22.99	14.82	13.13	15.10	11.62	14.40	12.39
24	12.05	23.80	24.51	23.00	25.49	22.68	14.90	12.94	14.82	11.85	14.29	12.30
25	12.20	26.97	24.04	22.55	25.41	22.33	14.94	12.74	14.68	11.82	14.02	12.26
26	12.31	28.28	23.51	22.25	25.42	21.97	14.82	12.57	14.45	11.81	13.77	12.20
27	12.39	28.25	22.98	21.91	25.39	21.64	14.62	12.44	14.04	11.92	13.61	12.13
28	12.68	27.61	22.48	21.58	25.20	21.33	14.43	12.33	13.63	12.17	13.29	12.06
29	13.05	26.84	22.08	21.36	---	21.01	14.25	12.25	13.30	12.36	13.23	11.98
30	13.90	26.16	21.76	21.21	---	20.65	14.07	12.19	13.06	12.75	13.48	11.92
31	16.18	---	21.55	21.05	---	20.27	---	12.13	---	12.75	13.59	---
TOTAL	396.96	661.52	762.59	742.10	735.16	693.79	486.22	398.44	402.81	374.65	419.66	402.55
MEAN	12.81	22.05	24.60	23.94	26.26	22.38	16.21	12.85	13.43	12.09	13.54	13.42
MAX	16.18	28.28	27.18	26.71	33.07	24.87	19.88	13.91	15.80	12.89	14.51	15.00
MIN	12.04	16.47	21.55	21.05	20.20	20.27	14.07	12.13	11.94	11.61	12.56	11.92

CAL YR 1985 TOTAL 5940.15 MEAN 16.27 MAX 28.28 MIN 11.47
WTR YR 1986 TOTAL 6476.45 MEAN 17.74 MAX 33.07 MIN 11.61

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
08...	1730	3320	71	6.30	16.0	11	7.0	71	140	160	15	11
JAN												
30...	1345	1700	91	6.70	9.0	6.9	9.6	94	69	29	17	8
APR												
29...	1830	310	178	7.10	23.5	--	7.0	83	K12	61	--	--
AUG												
01...	0925	201	168	7.40	28.0	13	5.9	78	57	100	40	12

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
NOV												
08...	11	3.3	1.6	6.2	42	.7	2.7	6	5.0	4.0	5.1	4.1
JAN												
30...	8	3.8	1.8	9.8	52	1	2.0	10	9.0	8.8	11	3.5
APR												
29...	--	--	--	--	--	--	--	23	--	21	25	3.2
AUG												
01...	12	9.7	3.7	13	39	.9	3.7	29	28	28	34	2.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV												
08...	6.6	12	<.10	7.7	70	44	.10	627	--	<.010	.13	.060
JAN												
30...	9.1	17	<.10	4.9	58	55	.08	266	--	<.010	.40	.060
APR												
29...	--	--	--	--	--	--	--	--	.81	.020	.83	.070
AUG												
01...	12	20	.20	5.6	102	92	.14	55	1.3	.020	1.3	.040

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV												
08...	.040	.05	--	--	.64	.70	.100	.31	.040	.020	.06	280
JAN												
30...	.080	.10	--	--	.64	.70	.090	.28	.020	.020	.06	100
APR												
29...	.080	.10	3.6	.07	.53	.60	.190	.58	.120	.080	.25	--
AUG												
01...	.060	.08	5.8	.07	.56	.60	.380	1.2	.400	.230	.71	70

02329000 OCHLOCKONEE RIVER NEAR HAVANA, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV											
08...	<1	23	<.5	<1	<1	<3	1	690	<1	<4	34
JAN											
30...	<1	19	<.5	<1	<1	<3	2	550	<1	<4	19
APR											
29...	--	--	--	--	--	--	--	--	--	--	--
AUG											
01...	1	19	<.5	<1	<1	<3	<1	330	--	<4	39

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV											
08...	<.1	<10	<1	<1	<1	17	<6	7	15	134	47
JAN											
30...	<.1	<10	2	<1	<1	21	<6	14	8	37	50
APR											
29...	--	--	--	--	--	--	--	--	9	7.5	78
AUG											
01...	<.1	<10	4	<1	3	53	<6	4	18	9.8	61

02329500 LITTLE RIVER NEAR QUINCY, FL

LOCATION.--Lat 30°35'14", long 84°29'48", in NW¼ sec.12, T.2 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, near left bank on downstream side of bridge on State Highway 12, 0.5 mi southwest of Shady Rest, 1.1 mi downstream from confluence of Willacoochee and Attapulgus Creeks, 4.5 mi east of Quincy, and 12 mi upstream from mouth.

DRAINAGE AREA.--237 mi^2.

PERIOD OF RECORD.--April 1950 to March 1979; April 1979 to September 1980 (discharge measurements only); October 1980 to current year.

REVISED RECORDS.--WSP 1704: 1958, 1959; WSP 1905: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 83.19 ft above National Geodetic Vertical Datum of 1929, unadjusted. Prior to June 5, 1978 at site 50 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Feb. 28 to Apr. 9. Records fair, except for period of estimated record, which is poor.

AVERAGE DISCHARGE.--34 years (water years 1951-78, 1981-86), 295 ft^3/s 16.90 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 45,600 ft^3/s Sept. 22, 1968, gage height, 24.65 ft, from flood-marks; minimum, 6.7 ft^3/s Oct. 5, 6, 1988, July 2, 1989, gage height, 0.52 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 23	0800	6310	14.70	Feb. 11	0600	*9180	*15.90
Dec. 14	1500	3450	13.00	Mar. 16		*1550	*11.08
Jan. 12	0300	3670	13.16				

* Estimated "mean daily"

Minimum discharge, 25 ft^3/s July 11, gage height, 0.98 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	662	554	643	272	425	210	89	71	44	110	517
2	69	641	839	735	261	400	200	86	111	39	72	357
3	172	575	987	717	254	385	194	82	122	55	113	408
4	185	357	800	640	251	425	188	77	93	51	124	501
5	144	182	560	737	382	520	185	73	69	44	81	854
6	109	130	393	773	1130	550	179	73	62	39	129	578
7	101	114	311	797	3180	500	174	73	58	40	240	324
8	99	106	265	673	3360	440	170	72	50	38	186	216
9	78	99	244	500	2510	375	163	69	52	32	113	172
10	71	93	234	699	4790	350	156	64	52	29	81	161
11	69	91	225	2230	8700	345	153	61	53	27	91	186
12	67	88	396	3290	5510	340	152	60	80	34	78	218
13	63	88	1620	1960	2570	335	175	61	62	32	89	549
14	63	88	3190	1190	1500	780	202	60	56	36	80	539
15	61	90	2530	834	1160	1470	190	59	52	39	78	256
16	60	89	1490	591	963	1550	175	54	52	36	111	176
17	58	86	995	467	790	980	157	52	55	49	304	141
18	56	84	674	420	786	620	149	51	51	39	278	141
19	57	83	469	398	847	470	140	63	52	40	121	179
20	59	83	384	374	852	450	133	185	82	36	91	140
21	61	207	342	353	804	540	145	173	124	34	153	110
22	60	1840	313	333	705	620	160	123	73	61	321	92
23	82	5470	298	319	635	550	160	91	54	86	266	153
24	93	2730	293	311	586	440	144	74	44	113	182	216
25	77	1400	282	298	598	340	128	64	40	64	103	164
26	70	903	264	348	579	300	119	59	34	45	84	118
27	73	550	249	404	517	275	113	54	38	53	210	92
28	159	376	246	419	470	255	105	52	39	106	270	81
29	210	320	317	364	---	245	100	49	37	84	606	73
30	215	390	391	324	---	230	94	48	42	247	840	66
31	460	---	416	295	---	220	---	50	---	193	738	---
TOTAL	3258	18015	20551	22436	44962	15705	4713	2301	1860	1865	6324	7758
MEAN	105	601	663	724	1606	507	157	74.2	62.0	60.2	204	259
MAX	460	5470	3190	3290	8700	1550	210	185	124	247	840	854
MIN	56	83	225	295	251	220	94	48	34	27	72	66
CFSM	.44	2.54	2.80	3.05	6.78	2.14	.66	.31	.26	.25	.86	1.09
IN.	.51	2.83	3.23	3.52	7.06	2.47	.74	.36	.29	.29	.99	1.22
AC-FT	6460	35730	40760	44500	89180	31150	9350	4560	3690	3700	12540	15390

CAL YR 1985	TOTAL	94695	MEAN 259	MAX 5470	MIN 34	CFSM 1.09	IN 14.86	AC-FT 187800		
WTR YR 1986	TOTAL	149748	MEAN 410	MAX 8700	MIN 27	CFSM 1.73	IN 23.50	AC-FT 297000		

02329534 QUINCY CREEK AT S267 AT QUINCY, FL

LOCATION.--Lat 30°36'00", long 84°34'50", in NW¼ sec.6, T.2 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at culvert on State Highway 267, 0.9 mi north of Quincy, and 6.2 mi upstream from mouth.

DRAINAGE AREA.--16.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to September 1977, December 1977 to current year.

REVISED RECORDS.--WDR FL-83-4: 1980(M). WDR FL-85-4: 1975(P), 1976, 1977, 1979(M).

GAGE.--Water-stage recorder. Datum of gage is 129.00 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1985, gage datum was incorrectly reported as 126.00 ft.

REMARKS.--Estimated daily discharges: May 6-23. Records good. Streamflow affected by city water plant withdrawal about 400 ft above gage.

AVERAGE DISCHARGE.--11 years (water years 1975-77, 1978-86), 27.4 ft^3/s, 22.16 in/yr (unadjusted).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,470 ft^3/s, March 6, 1984, gage height, 8.64 ft; minimum, 2.3 ft^3/s May 7, 8, 1985, May 26-29, 1986; minimum gage height, 0.09 ft May 7, 8, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 22, 1969, reached a stage of 11.68 ft (corrected), present datum, from floodmarks, discharge, 3,170 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft^3/s and maximum (*).

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 22	0300	731	7.21	Aug. 29	2030	488	6.23
Feb. 11	0200	*757	*7.30				

Minimum discharge, 2.3 ft^3/s May 26-29, gage height, 0.12 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	51	69	59	24	34	22	11	15	15	18	34
2	14	28	66	40	23	33	22	11	11	17	16	48
3	16	20	41	32	23	33	21	10	9.3	24	27	62
4	15	16	32	45	23	44	20	10	7.9	17	20	55
5	14	14	28	48	105	38	20	10	7.5	13	18	83
6	11	13	25	37	172	35	20	9.5	7.3	12	38	44
7	10	15	23	32	104	33	19	9.0	6.8	13	30	30
8	9.7	14	22	29	111	31	18	8.8	11	11	21	23
9	9.0	12	20	26	145	31	18	8.5	45	9.9	17	20
10	8.3	11	19	177	362	31	17	8.2	24	8.8	17	20
11	7.5	12	18	124	415	31	17	8.0	20	9.1	17	25
12	8.2	12	59	77	153	30	18	7.8	14	9.6	16	61
13	8.3	12	177	54	98	31	21	7.5	12	9.4	15	38
14	7.8	12	86	44	82	87	19	7.2	21	8.4	16	25
15	7.2	12	51	38	83	51	17	7.0	17	7.7	15	21
16	7.5	12	39	35	66	41	17	6.8	14	8.0	12	20
17	11	11	34	33	58	36	16	6.5	11	7.9	12	18
18	11	11	30	32	77	33	16	6.3	9.5	7.2	12	17
19	9.0	11	27	31	55	32	15	18	9.1	6.7	32	19
20	7.7	13	25	29	55	38	15	12	13	6.4	94	16
21	7.3	129	24	28	49	36	20	5.7	12	9.0	53	14
22	7.0	447	27	27	47	32	20	4.6	9.4	18	33	13
23	7.5	136	26	26	47	30	17	4.4	7.7	46	23	19
24	6.7	89	23	25	41	29	16	3.8	6.7	39	17	16
25	6.9	57	22	25	38	28	15	3.5	7.7	23	13	13
26	7.0	36	19	38	36	27	14	3.4	9.3	18	14	12
27	11	28	20	32	36	25	13	3.0	18	16	14	12
28	18	23	23	27	34	25	12	3.5	27	14	37	11
29	18	38	30	27	---	24	12	3.9	17	18	180	10
30	30	47	24	26	---	24	12	4.9	20	52	122	10
31	50	---	38	25	---	23	---	4.5	---	25	47	---
TOTAL	376.2	1342	1167	1328	2562	1056	519	228.3	421.2	497.1	1014	809
MEAN	12.1	44.7	37.6	42.8	91.5	34.1	17.3	7.36	14.0	16.0	32.7	27.0
MAX	50	447	177	177	415	87	22	18	45	52	180	83
MIN	6.7	11	18	25	23	23	12	3.0	6.7	6.4	12	10
CFSM	.72	2.66	2.24	2.55	5.45	2.03	1.03	.44	.83	.95	1.95	1.61
IN.	.83	2.97	2.58	2.94	5.67	2.34	1.15	.51	.93	1.10	2.25	1.79
AC-FT	746	2660	2310	2630	5080	2090	1030	453	835	986	2010	1600

CAL YR 1985	TOTAL	7749.1	MEAN 21.2	MAX 447	MIN 3.2	CFSM 1.26	IN 17.16	AC-FT	15370	
WTR YR 1986	TOTAL	11319.8	MEAN 31.0	MAX 447	MIN 3.0	CFSM 1.85	IN 25.06	AC-FT	22450	

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02329534 QUINCY CREEK AT S267 AT QUINCY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
FEB 04...	1700	21	49	7.10	16.5	70	35	10.6	17	3	3	4.0
APR 23...	1430	18	46	6.90	19.5	50	15	8.4	13	2	2	2.9
JUL 24...	1535	34	42	6.70	29.0	50	20	10.6	14	0	0	3.8
SEP 08...	1300	23	48	6.70	25.5	40	9.6	8.0	16	1	1	4.1

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
FEB 04...	1.8	3.2	29	.4	.50	14	2.2	2.8	5.0	<.10	5.1	25
APR 23...	1.4	2.9	32	.4	.40	11	2.7	4.7	5.2	.20	5.5	40
JUL 24...	1.2	2.8	29	.3	.40	14	5.4	4.2	4.5	<.10	5.1	29
SEP 08...	1.5	3.0	28	.3	.60	15	5.8	6.8	4.1	.10	6.6	56

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)
FEB 04...	31	.03	1.4	.68	.020	.70	<1	<100	<1	<10	4	1900
APR 23...	30	.05	1.9	.59	.010	.60	<1	<100	<1	<10	3	1500
JUL 24...	30	.04	2.7	--	<.010	.20	--	<100	<1	<10	20	1800
SEP 08...	36	.08	3.5	.29	.010	.30	<1	<100	<1	--	8	1600

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	SELE-NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	PCB, TOTAL (UG/L)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L)	PER-THANE TOTAL (UG/L)	MIREX, TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)
FEB 04...	5	60	<.10	<1	<1	15	30	<.1	<.10	<.1	<.01	<.010
APR 23...	<1	50	<.10	<1	<1	9	30	--	--	--	--	--
JUL 24...	<5	100	<.10	--	<3	14	<20	<.1	<.10	<.1	<.01	<.010
SEP 08...	<5	60	.20	<1	<1	16	<10	--	--	--	--	--

DATE	CHLOR-DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI-AZINON, TOTAL (UG/L)	DI-ELDRIN TOTAL (UG/L)	ENDO-SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA-CHLOR, TOTAL (UG/L)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)
FEB 04...	<.1	<.010	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.010	<.010	<.010
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--
JUL 24...	<.1	<.010	<.010	<.010	<.01	<.010	<.010	<.010	<.01	<.010	<.010	<.010
SEP 08...	--	--	--	--	--	--	--	--	--	--	--	--

02329534 QUINCY CREEK AT S267 AT QUINCY, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MALA-THION, TOTAL (UG/L)	METH-OXY-CHLOR, TOTAL (UG/L)	METHYL PARA-THION, TOTAL (UG/L)	METHYL TRI-THION, TOTAL (UG/L)	PARA-THION, TOTAL (UG/L)	TOX-APHENE, TOTAL (UG/L)	TOTAL TRI-THION (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
FEB											
04...	<.01	<.01	<.01	<.01	<.01	<1	<.01	<.01	<.01	<.01	<.01
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
JUL											
24...	<.01	--	<.01	<.01	<.01	<1	<.01	<.01	<.01	<.01	<.01
SEP											
08...	--	--	--	--	--	--	--	--	--	--	--

02329600 LITTLE RIVER NEAR MIDWAY, FL

LOCATION.--Lat 30°30'44", long 84°31'25", in SW¼ sec.3, T.1 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 268, 0.5 mi upstream from Monroe Creek, 3.2 mi above mouth, and 3.7 mi west of Midway.

DRAINAGE AREA.--305 mi^2.

PERIOD OF RECORD.--Annual maximums, water years 1965-85. October 1985 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Oct. 22, 1985, nonrecording and crest-stage gages at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 1-22, May 3-19, 23, June 1. Records good, except those below 600 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49,200 ft^3/s Sept. 22, 1969, from rating curve extended above 15,000 ft^3/s on basis of measurement of peak flow 3.6 mi upstream (station 02329565); gage height, 86.25 ft from floodmarks; minimum measured, 52 ft^3/s May 22, 1968.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,100 ft^3/s Feb. 11, gage height, 79.65 ft; minimum daily, 56 ft^3/s July 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	758	649	759	286	471	247	123	95	109	222	852
2	90	730	870	897	277	422	248	119	103	101	189	536
3	130	595	1050	858	284	392	248	115	117	105	221	478
4	170	426	1030	799	314	461	248	111	109	101	236	615
5	180	224	799	986	539	556	235	108	101	87	192	1130
6	140	183	537	938	1980	549	225	107	100	80	183	1130
7	120	181	381	918	2560	496	221	106	100	75	283	565
8	110	168	313	867	4170	412	220	105	99	68	252	298
9	100	140	282	674	3540	356	205	105	111	62	177	219
10	95	127	257	903	5030	338	189	102	120	56	156	191
11	85	134	234	2140	11000	352	177	98	121	58	175	192
12	78	144	565	3440	8560	362	178	96	126	58	145	194
13	76	143	2520	3070	4230	325	196	92	133	62	138	417
14	75	136	3520	1990	2590	915	221	90	129	77	141	617
15	74	125	3600	1330	1940	1350	213	88	134	72	144	353
16	73	115	2530	919	1550	1540	192	87	140	78	136	219
17	72	102	1680	671	1220	1690	174	86	147	84	222	182
18	71	93	1120	567	1160	1220	168	84	157	85	287	196
19	70	105	714	504	1210	774	165	172	160	82	188	201
20	74	120	498	488	1120	589	164	219	149	80	197	187
21	75	198	416	440	1070	619	166	226	138	78	222	157
22	76	1530	379	399	984	593	185	188	137	79	318	144
23	76	4780	364	373	905	559	183	140	113	137	295	146
24	79	4870	369	406	780	467	173	115	102	231	204	212
25	79	2590	338	408	714	397	162	98	98	181	147	186
26	83	1580	303	501	700	357	154	92	98	137	132	154
27	92	918	274	547	646	336	148	86	103	135	164	131
28	133	483	275	511	544	324	142	83	100	161	248	118
29	178	344	368	432	---	305	134	79	105	168	626	108
30	213	425	437	360	---	283	128	77	109	286	1460	101
31	469	---	469	318	---	263	---	76	---	321	1320	---
TOTAL	3511	22467	27141	28411	59903	18073	5709	3473	3574	3434	9020	10229
MEAN	113	749	876	916	2139	583	190	112	119	111	291	341
MAX	469	4870	3600	3440	11000	1690	248	226	160	321	1460	1130
MIN	70	93	234	316	277	263	128	76	95	56	132	101
CFSM	.37	2.46	2.87	3.00	7.01	1.91	.62	.37	.39	.36	.95	1.12
IN.	.43	2.74	3.31	3.47	7.31	2.20	.70	.42	.44	.42	1.10	1.25
AC-FT	6960	44560	53830	56350	118800	35850	11320	6890	7090	6850	17890	20290

WTR YR 1986 TOTAL 194965 MEAN 534 MAX 11000 MIN 56 CFSM 1.75 IN 23.78 AC-FT 386700

02330000 OCHLOCKONEE RIVER NEAR BLOXHAM, FL

LOCATION.--Lat 30°23'10", long 84°38'59", in NE¼ sec.20, T.1 S., R.4 W., Leon County, Hydrologic Unit 03120003, on left bank 900 ft upstream from bridge on State Highway 20, 1,200 ft downstream from Jackson Bluff Dam, 1.5 mi southwest of Bloxham, and 65 mi upstream from mouth.

DRAINAGE AREA.--1,700 mi^2, approximately.

PERIOD OF RECORD.--June 1926 to current year. Low-flow records not equivalent prior to October 1, 1954, due to undetermined amount of seepage inflow.

REVISED RECORDS.--WSP 1002: 1940-42. WSP 1704: 1958-59. WSP 1905, WDR FL-76-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.69 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 9, 1930, nonrecording gage at site 700 ft upstream at datum 5.00 ft higher. Apr. 9, 1930 to Jan. 19, 1939, water-stage recorder at present site at datum 5.00 ft higher. Jan. 20, 1939 to Sept. 30, 1954, water-stage recorder at site 2,000 ft downstream at datum 5.00 ft higher. Oct. 1, 1954 to Sept. 30, 1985, water-stage recorder at site 2,000 ft downstream at present datum.

REMARKS.--No estimated discharges. Records fair. Flow regulated since 1929 by Jackson Bluff Dam above station and storage in Lake Talquin (02329900). Since October 1981, the publication of adjusted values for storage has been discontinued since the difference between adjusted and the unadjusted values have been minimal.

AVERAGE DISCHARGE.--58 years (water years 1927-82, 85-86), 1,694 ft^3/s, 13.53 in/yr, unadjusted; 27 years (water years 1955-81) 1,781 ft^3/s 14.23 in/yr, adjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89,400 ft^3/s Sept. 23, 1969, gage height, 29.2 ft, from flood-mark; minimum discharge, since October 1954, 1.0 ft^3/s Nov. 1,2, 1957, caused by closure of breaks in earth embankment of Jackson Bluff Dam (indeterminate prior to October 1954).

EXTREMES OUTSIDE THE PERIOD OF RECORD.--Maximum stage since 1834, 32.64 ft Sept. 30, 1957, from flood marks established by local resident, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 38,100 ft^3/s Feb. 14, gage height, 24.79 ft; minimum, 99 ft^3/s May 15-19, minimum gage height, 3.48 ft Oct. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	302	3970	6560	4010	2220	5170	2310	503	380	398	430	3190
2	288	3380	5840	3940	1900	5130	1250	457	222	399	500	2440
3	233	3160	5680	4040	1330	4400	1360	210	171	402	284	1690
4	207	2140	4560	4000	536	4440	1490	176	126	404	392	912
5	207	2680	4060	4090	2240	4060	1860	133	124	407	857	1380
6	206	3690	3570	4080	7650	3800	1400	134	123	405	851	1680
7	821	4250	3990	3830	8340	3770	1230	129	123	404	1160	1680
8	1540	4460	4000	4660	7310	3760	1310	119	123	405	864	1670
9	981	4090	3880	5170	9140	3650	1310	110	122	403	525	1010
10	205	3230	3990	5190	12700	2340	1360	108	121	279	416	779
11	243	2110	3960	6290	26700	2070	1010	106	121	178	804	735
12	236	1870	3700	6780	34300	3020	715	105	121	194	1390	629
13	234	1850	8710	6880	37300	4830	848	104	120	194	811	690
14	233	1830	10100	7380	37600	4580	1020	102	120	193	493	882
15	216	1710	8930	6630	35000	4090	1290	100	120	184	427	921
16	198	1540	7610	5730	26200	2470	1080	99	120	167	417	751
17	234	1480	7220	6240	17300	3350	798	99	120	197	410	557
18	259	944	7250	6140	11700	3870	626	99	228	209	497	455
19	260	174	7170	6240	9100	3860	633	290	637	210	676	450
20	260	985	6510	5280	8290	5050	663	498	1120	210	960	455
21	260	3980	5680	5280	6230	5280	655	510	1060	198	1550	447
22	222	6430	5310	4770	6580	4500	639	511	945	205	1330	429
23	161	6080	4810	3750	6650	4050	654	479	854	207	744	436
24	174	4740	4770	2540	6200	3550	645	449	590	207	691	449
25	175	6600	4420	3100	5460	2950	617	391	415	207	673	450
26	174	7890	4080	3190	5410	3140	621	429	407	209	475	450
27	174	8190	4000	3180	5390	2900	615	415	406	210	545	450
28	175	8010	2590	3450	5300	2760	612	408	402	212	1280	448
29	176	8010	2300	3520	---	2740	608	391	401	212	1260	449
30	611	7440	3390	3180	---	2730	600	389	394	214	2120	451
31	3010	---	3060	3060	---	2680	---	388	---	222	3300	---
TOTAL	12675	116913	161700	145620	344076	114990	29830	8441	10336	8143	27132	27415
MEAN	409	3897	5216	4697	12290	3709	994	272	345	263	875	914
MAX	3010	8190	10100	7380	37600	5280	2310	511	1120	407	3300	3190
MIN	161	174	2300	2540	536	2070	600	99	120	167	284	429
CFSM	.24	2.29	3.07	2.76	7.23	2.18	.58	.16	.20	.16	.52	.54
IN.	.28	2.56	3.54	3.19	7.53	2.52	.65	.18	.23	.18	.59	.60
AC-FT	25140	231900	320700	288800	682500	228100	59170	16740	20500	16150	53820	54380

CAL YR 1985 TOTAL 552576 MEAN 1514 MAX 10100 MIN 135 CFSM .89 IN 12.09 AC-FT 1096000
WTR YR 1986 TOTAL 1007271 MEAN 2760 MAX 37600 MIN 99 CFSM 1.62 IN 22.04 AC-FT 1998000

02330100 TELOGIA CREEK NEAR BRISTOL, FL

LOCATION.--Lat 30°25'35", long 84°55'40", in NW¼ sec.3, T.1 S., R.7 W., Liberty County, Hydrologic Unit 03120003, near left bank at downstream side of bridge on State Highway 20, 600 ft upstream from White Branch, 3.0 mi east of Bristol, and 33 mi upstream from mouth.

DRAINGAGE AREA.--126 mi^2.

PERIOD OF RECORD.--March 1950 to September 1971, October 1974 to September 1979, October 1980 to current year.

REVISED RECORDS.--WSP 1504: 1950-51, 1953 (M), 1955-56.

GAGE.--Water-stage recorder. Datum of gage is 99.50 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Estimated daily discharges: Oct. 1-7. Records fair except for estimated daily discharge, which are poor.

AVERAGE DISCHARGE.--32 years, (water years 1951-71, 1975-79, 1981-86) 221 ft^3/s, 23.82 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,600 ft^3/s Sept. 22, 1969, gage height, 16.65 ft, from flood-mark; minimum, 28 ft^3/s Sept. 14, Oct. 26, 27, 1954, gage height, 1.35 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage Height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Nov. 23	0700	3370	8.69	Feb. 7	2200	1770	7.62
Jan. 12	0800	1640	7.51	Feb. 11	1900	*3530	*8.78

Minimum discharge, 48 ft^3/s July 22, 23; gage height, 2.32 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	974	391	474	190	254	156	82	60	127	191	657
2	67	840	597	518	182	240	151	80	64	121	137	340
3	66	488	731	585	177	230	145	78	62	127	111	229
4	65	251	706	492	174	255	142	75	62	109	99	227
5	64	176	470	569	227	317	139	73	56	106	145	356
6	64	143	327	673	646	368	135	73	55	115	208	249
7	63	126	260	659	1500	330	131	74	53	171	288	200
8	63	118	222	456	1550	258	128	72	52	113	182	164
9	62	112	203	327	1180	224	126	70	83	85	150	139
10	66	107	189	437	1570	208	122	69	125	71	117	128
11	63	103	181	965	3050	206	113	66	121	66	197	118
12	60	100	285	1520	2870	203	114	65	198	70	431	116
13	60	99	810	1020	1380	201	118	68	176	72	280	160
14	57	100	1360	654	872	508	125	68	141	68	577	189
15	57	101	1260	474	690	886	126	67	133	63	316	188
16	58	100	836	382	616	943	119	64	105	67	162	146
17	63	101	551	329	567	571	115	61	101	109	127	128
18	60	99	407	294	581	373	112	60	84	73	108	118
19	58	95	336	273	671	279	109	84	100	63	108	111
20	64	118	292	254	755	269	106	152	100	56	150	103
21	62	320	249	236	598	324	107	168	84	51	173	93
22	60	1640	226	219	476	364	117	140	110	49	190	95
23	78	2880	215	208	442	325	122	101	103	55	184	258
24	83	1360	209	202	425	250	113	83	82	141	137	319
25	70	768	208	196	417	213	105	74	67	322	108	190
26	64	498	200	229	354	198	100	69	60	226	92	148
27	62	362	188	286	302	188	98	65	63	186	90	133
28	101	289	189	330	274	179	93	62	63	139	126	113
29	204	252	275	306	---	172	88	60	68	124	362	100
30	388	283	325	231	---	164	86	61	87	106	889	89
31	627	---	354	202	---	159	---	62	---	160	1000	---
TOTAL	3047	13003	13052	14000	22736	9659	3561	2446	2718	3411	7435	5604
MEAN	98.3	433	421	452	812	312	119	78.9	90.6	110	240	187
MAX	627	2880	1360	1520	3050	943	156	168	198	322	1000	657
MIN	57	95	181	196	174	159	86	60	52	49	90	89
CFSM	.78	3.44	3.34	3.59	6.44	2.48	.94	.63	.72	.87	1.91	1.48
IN.	.90	3.84	3.85	4.13	6.71	2.85	1.05	.72	.80	1.01	2.20	1.65
AC-FT	6040	25790	25890	27770	45100	19160	7060	4850	5390	6770	14750	11120

CAL YR 1985 TOTAL 63674 MEAN 174 MAX 2880 MIN 37 CFSM 1.38 IN 18.80 AC-FT 123300
WTR YR 1986 TOTAL 100672 MEAN 276 MAX 3050 MIN 49 CFSM 2.19 IN 29.72 AC-FT 199700

02330166 OCHLOCKONEE RIVER NEAR MCINTYRE, FL

LOCATION.--Lat 29°59'19", long 84°30'09", in SE¼ sec.2, T.6 S., R.3 W., Franklin County, Hydrologic Unit 03120003, near left bank on upstream side of bridge on U.S. Highway 319, 1.6 mi northeast of McIntyre and 6.4 mi upstream from mouth.

DRAINAGE AREA.--2,230 mi^2.

PERIOD OF RECORD.--July 1974 to April 1975 (discharge measurements only), December 1978 to current year (tidal gage heights and discharge measurements).

GAGE.--Water-stage recorder. Datum of gage is 10.00 ft below National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).

REMARKS.--Gage heights affected by tide. Gage-height records collected in this vicinity 1941-75, are available in the files of the U.S. Army Corps of Engineers, Mobile District.

EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 17.21 ft Sept. 1, 1985 (Hurricane Elena); minimum gage height, 7.62 ft Jan. 18, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height since September 1941, 16.99 ft June 19, 1972 (Hurricane Agnes), present site and datum; minimum gage height since September 1941, 7.17 ft Sept. 15, 1975, present site and datum, from information provided by the U.S. Army Corps of Engineers, Mobile District.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 16.22 ft Nov. 21 (Hurricane Kate); minimum gage height, 7.89 ft Mar. 22.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL HIGH VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.49	14.30	12.82	12.36	11.70	10.48	11.52	11.67	12.19	11.99	11.76	12.59
2	12.65	12.68	12.66	11.91	11.62	11.35	11.39	11.62	12.36	11.74	12.06	12.82
3	12.45	13.06	11.34	11.97	11.75	11.65	11.59	11.36	12.46	11.89	11.98	12.65
4	12.41	11.45	11.69	12.17	12.22	11.52	12.06	11.77	12.21	12.15	12.03	12.76
5	12.25	10.91	11.92	10.26	12.11	11.06	12.11	12.31	12.25	12.46	12.19	12.70
6	11.15	11.00	10.95	11.81	12.23	11.17	11.95	12.12	12.28	12.20	12.40	12.60
7	11.34	11.88	11.89	11.41	12.30	11.42	11.95	12.03	12.22	12.16	12.27	12.61
8	11.99	12.01	11.85	11.69	12.28	11.56	11.89	12.09	12.27	12.21	12.17	12.71
9	11.75	12.33	12.36	11.16	12.48	12.09	11.89	12.10	12.18	12.17	12.12	12.81
10	11.87	12.49	12.47	12.20	12.95	12.38	11.59	12.30	11.99	12.03	12.16	12.91
11	12.36	12.45	12.70	12.15	13.17	12.32	11.90	12.37	11.95	11.74	12.20	12.74
12	12.48	12.53	13.09	11.80	12.16	12.24	12.28	12.40	11.67	11.58	12.69	12.46
13	12.56	12.61	13.47	11.79	12.64	12.33	12.25	12.39	11.74	11.73	13.29	12.16
14	12.60	12.55	12.21	11.56	13.80	12.33	11.82	12.17	11.68	11.66	12.13	12.23
15	12.68	12.62	11.38	11.60	13.93	12.24	11.79	11.84	11.91	11.60	11.94	12.95
16	12.73	12.53	11.94	11.79	14.11	12.04	11.47	12.09	11.88	11.79	12.04	12.79
17	12.76	12.38	11.79	11.89	13.99	11.43	10.87	12.22	11.82	11.98	12.12	12.78
18	12.74	11.88	11.70	12.13	13.60	11.75	11.17	12.41	12.11	12.02	12.28	12.56
19	12.41	11.74	11.45	11.40	13.09	12.02	11.50	12.64	12.39	11.98	12.52	12.52
20	12.52	11.78	11.36	11.16	12.63	10.90	12.29	12.67	12.43	12.19	12.69	12.55
21	12.48	16.22	10.91	11.41	12.46	9.45	12.56	12.39	12.46	12.53	12.67	12.48
22	12.55	---	11.65	11.61	12.48	9.87	11.89	12.34	12.66	12.37	12.20	12.33
23	12.67	---	11.82	11.77	12.71	10.95	11.70	12.44	12.76	11.95	11.95	12.36
24	12.55	---	12.57	11.76	12.76	11.55	12.01	12.51	12.55	12.07	11.72	12.51
25	12.21	12.48	12.18	12.12	12.12	12.02	12.46	12.51	12.33	12.03	11.86	12.37
26	12.56	12.70	10.69	12.51	12.27	12.26	12.44	12.62	12.08	11.90	12.20	12.08
27	13.10	12.75	11.85	10.82	12.60	12.30	12.35	12.58	11.73	12.09	12.05	11.70
28	13.56	13.02	12.16	10.68	12.38	12.43	12.36	12.45	11.79	12.03	12.04	11.70
29	13.33	13.21	12.46	11.82	---	12.25	12.17	11.92	11.99	12.03	12.39	12.43
30	13.76	12.94	11.70	11.71	---	12.03	11.88	11.88	12.14	12.03	12.07	12.56
31	14.51	---	12.32	11.61	---	11.87	---	11.91	---	11.88	12.37	---
TOTAL	389.47	---	371.35	362.03	354.54	361.26	357.11	378.12	364.48	372.18	378.56	375.42
MEAN	12.56	---	11.98	11.68	12.66	11.65	11.90	12.20	12.15	12.01	12.21	12.51
MAX	14.51	---	13.47	12.51	14.11	12.43	12.56	12.67	12.76	12.53	13.29	12.95
MIN	11.15	---	10.69	10.26	11.62	9.45	10.87	11.36	11.67	11.58	11.72	11.70

02330166 OCHLOCKONEE RIVER NEAR MCINTYRE, FL.--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
TIDAL LOW VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10.29	13.77	10.99	10.01	9.40	9.16	9.04	9.26	10.28	9.77	9.25	10.38
2	10.27	10.66	10.51	9.85	9.28	8.68	8.78	9.29	10.29	9.21	10.73	10.55
3	9.96	11.07	9.94	9.97	9.09	9.33	9.15	9.07	10.34	9.19	9.41	10.93
4	9.85	9.33	10.18	10.12	9.25	9.42	9.67	9.57	9.82	9.53	10.65	10.19
5	9.51	9.02	10.36	10.15	9.66	8.96	9.73	9.86	10.95	9.88	9.25	10.35
6	9.11	9.60	9.55	9.10	9.78	9.04	9.53	9.53	9.56	11.08	9.44	10.25
7	9.16	10.00	9.70	9.33	9.33	8.81	9.51	9.25	9.47	9.41	9.53	10.44
8	9.59	9.85	9.86	9.17	9.91	9.23	9.49	10.12	9.41	9.35	9.50	10.47
9	9.20	10.46	9.91	8.92	10.56	9.78	9.63	9.21	9.44	9.40	9.63	10.49
10	9.40	10.29	9.88	9.84	11.40	10.09	8.81	10.82	9.32	9.42	9.86	10.63
11	9.83	9.96	10.08	9.54	---	9.83	8.96	9.78	9.24	9.34	10.05	10.54
12	9.98	9.82	10.54	9.60	11.48	9.68	9.15	9.51	9.23	9.30	10.45	10.01
13	9.94	9.80	11.11	9.62	11.74	10.12	9.73	9.72	9.17	9.39	10.69	9.63
14	9.85	9.58	10.03	9.81	13.15	10.04	9.47	9.78	9.29	9.65	9.69	9.64
15	9.78	9.17	10.32	10.08	13.61	9.73	9.15	9.95	9.70	9.36	9.20	10.22
16	9.76	9.74	10.80	10.37	13.80	9.92	9.21	10.15	9.80	9.21	9.17	10.17
17	9.88	9.86	10.74	10.38	13.90	9.81	8.56	10.14	9.51	9.11	9.17	10.46
18	10.12	9.56	10.57	10.39	13.59	9.46	8.84	10.34	9.52	8.99	10.34	10.49
19	9.92	9.58	10.37	10.59	12.92	10.06	9.18	10.54	9.68	10.42	9.35	10.49
20	10.32	10.14	10.28	9.42	11.96	10.01	9.75	10.58	9.50	8.78	9.73	10.31
21	10.48	---	9.90	9.35	11.22	8.36	9.93	9.74	10.86	9.04	10.44	10.09
22	10.48	---	9.64	9.41	10.85	7.98	9.13	10.31	9.48	9.38	10.10	9.91
23	10.49	---	9.93	9.38	10.62	8.72	8.95	9.46	9.90	9.39	9.75	10.02
24	10.52	---	10.53	9.45	10.59	9.04	9.54	9.40	9.84	9.20	9.47	10.17
25	10.24	10.58	9.34	9.56	9.81	9.59	9.05	9.37	9.68	9.46	9.74	10.06
26	10.46	10.72	8.63	9.36	9.98	9.88	9.36	9.36	9.55	9.76	10.05	10.08
27	11.12	10.69	9.30	8.14	10.58	9.77	9.31	9.63	9.59	10.03	9.90	9.77
28	11.91	11.04	9.67	8.35	10.32	9.62	9.21	9.80	9.65	10.09	9.87	9.55
29	11.54	11.11	9.48	9.36	---	9.62	9.28	9.98	10.22	10.01	10.18	10.13
30	12.12	11.00	9.14	9.28	---	9.36	9.23	9.75	10.03	9.79	9.94	10.17
31	12.71	---	9.90	9.41	---	9.19	---	10.02	---	9.45	10.12	---
TOTAL	317.79	---	311.18	297.31	---	292.29	278.33	303.29	292.32	295.39	304.65	306.59
MEAN	10.25	---	10.04	9.59	---	9.43	9.28	9.78	9.74	9.53	9.83	10.22
MAX	12.71	---	11.11	10.59	---	10.12	9.93	10.82	10.95	11.08	10.73	10.93
MIN	9.11	---	8.63	8.14	---	7.98	8.56	9.07	9.17	8.78	9.17	9.55

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Figure 15. Location of stream gaging stations in the Apalachicola and Chipola River basins.

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°42'03", long 84°51'33", in NW¼ sec.32, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130011, on downstream side of right main pier on U.S. Highway 90, 0.6 mi downstream from Jim Woodruff Dam, 0.6 mi upstream from Mosquito Creek, 1.0 mi west of Chattahoochee, and 106 mi upstream from mouth.

DRAINAGE AREA.--17,200 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1939, published as "near River Junction." Gage-height records collected at site 0.9 mi downstream October 1919 to September 1925, and at site approximately 100 ft downstream October 1925 to December 1958 are contained in reports of National Weather Service.

REVISED RECORDS.--WSP 1906: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 40.58 ft above National Geodetic Vertical Datum of 1929 (National Weather Service bench mark). Prior to Dec. 16, 1939, water-stage recorder at site 0.9 mi downstream at datum 4.27 ft higher. Dec. 16, 1939 to June 25, 1952, water-stage recorder, June 26, 1952 to June 2, 1954, nonrecording gage, and June 3, 1954 to Oct. 14, 1958, water-stage recorder, at site approximately 100 ft downstream at datum 5.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Seminole Reservoir (02357500) 0.6 mi upstream since Feb. 4, 1957, Walter F. George Lake (02343240) since 1962, Bartlett's Ferry Reservoir (02341000) since 1926, West Point Lake (02339400) since October 1974, and Lake Sidney Lanier Reservoir (02334400) since 1956.

AVERAGE DISCHARGE.--58 years, 22,284 ft^3/s, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 293,000 ft^3/s Mar. 20, 1929, gage height, 38.97 ft, present datum, extended above 193,000 ft^3/s; minimum, 2,570 ft^3/s Aug. 6, 1986; minimum gage height, -2.12 ft Aug. 31, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61,000 ft^3/s Mar. 22, gage height, 18.49 ft Mar. 22; minimum, 2,570 ft^3/s Aug. 6; minimum gage height, -2.12 ft; minimum daily discharge, 4,430 ft^3/s Aug. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11000	9340	14400	19300	16100	23800	17600	10700	9010	8410	5140	5300
2	11100	9680	19100	19000	16100	15700	17000	10600	8860	8420	5260	5520
3	10100	9290	23200	18100	16200	11700	16200	10800	8850	8460	4570	5550
4	10200	9360	25600	19600	16100	14400	15700	10400	8830	8510	4930	5430
5	10100	9370	24500	23400	16200	17700	13600	10400	8780	8530	5420	5510
6	10200	9350	25500	20900	18800	16700	13500	10200	8830	8440	4990	5540
7	10200	9240	23100	20200	21100	16600	14000	10300	8930	8560	5660	4530
8	10300	9220	18500	19300	27400	16600	14800	10400	8950	8640	5740	5200
9	10200	9240	18000	18600	33800	16600	14900	10400	8870	8160	5850	5510
10	10200	9370	18100	22400	37500	16400	14900	10500	8850	7530	4810	6370
11	10200	9280	18100	23900	42600	16000	14400	10400	8780	7540	5740	7230
12	10200	9350	18500	21300	47100	16000	14100	10400	8900	7570	5060	7350
13	10100	9640	26500	20800	45600	16900	14000	9480	8880	7610	4940	7320
14	10300	9320	30200	20500	39700	39000	14000	9240	9030	7620	5290	6120
15	10300	9440	38400	20100	35800	57800	14100	8910	9160	7460	5560	5390
16	10100	9430	30600	20000	34800	58500	14000	8820	8760	7480	5540	4980
17	10000	9360	25700	20000	34200	44800	14000	8950	8670	7390	4510	5830
18	10100	9280	23400	19700	34200	37700	14000	8830	8720	7440	5200	7600
19	9320	9380	24200	19900	34200	29800	14000	8920	8820	7410	5370	7740
20	9080	9500	23200	19800	33700	31500	14000	8790	8800	7350	5630	7680
21	9200	10600	19500	19800	33100	42600	14200	8780	8810	7250	5610	7700
22	9170	16900	18900	18700	31700	58600	14200	8840	8700	7400	5440	7690
23	9240	17100	18800	17200	31000	53800	14300	8890	8230	6900	5500	7660
24	9260	15500	19100	17400	29000	47500	14300	8920	7830	6630	4530	7640
25	9210	14600	19000	17400	26800	36200	14200	9120	8340	6530	5440	7560
26	9200	13600	18400	17300	26700	29500	12300	8940	8930	6530	5310	7580
27	9410	13500	16400	17300	26300	29200	11000	8940	9380	6550	5280	7230
28	9490	13600	16500	17400	25700	31700	10800	8740	8990	6520	5440	5750
29	9380	13600	16500	17300	---	29400	10700	8910	8480	6390	5500	6080
30	9460	13800	16500	17300	---	22400	10700	8930	8410	6100	5340	6050
31	9460	---	17200	16600	---	18100	---	9090	---	5350	4430	---
TOTAL	305780	330240	674600	600500	831500	913200	419500	295540	263380	230680	163030	192640
MEAN	9864	11010	21760	19370	29700	29460	13980	9534	8779	7441	5259	6421
MAX	11100	17100	39200	23900	47100	58600	17600	10800	9380	8640	5850	7740
MIN	9080	9220	14400	16600	16100	11700	10700	8740	7830	5350	4430	4530
CFSM	.57	.64	1.27	1.13	1.73	1.71	.81	.55	.51	.43	.31	.37
IN.	.66	.71	1.46	1.30	1.80	1.98	.91	.64	.57	.50	.35	.42
AC-FT	606500	655000	1338000	1191000	1649000	1811000	832100	586200	522400	457600	323400	382100

CAL YR 1985 TOTAL 5516610 MEAN 15110 MAX 57300 MIN 8550 CFSM .88 IN 11.93 AC-FT 10940000
WTR YR 1986 TOTAL 5220590 MEAN 14300 MAX 58600 MIN 4430 CFSM .83 IN 11.29 AC-FT 10360000

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.27	1.43	3.95	6.20	4.80	8.07	5.46	2.10	1.26	.96	-.72	-.92
2	2.32	1.39	6.11	6.08	4.80	4.47	5.20	2.05	1.18	.96	-.68	-.82
3	1.82	1.40	7.85	5.67	4.81	2.62	4.85	2.16	1.18	.98	-1.05	-.80
4	1.86	1.43	8.83	6.31	4.80	3.93	4.58	1.97	1.17	1.01	-.90	-.87
5	1.80	1.44	8.35	7.91	4.82	5.51	3.56	1.94	1.14	1.01	-.68	-.82
6	1.84	1.43	8.77	6.88	5.98	5.07	3.48	1.87	1.17	.97	-.91	-.81
7	1.84	1.37	7.80	6.58	6.95	5.03	3.74	1.91	1.22	1.03	-.81	-1.30
8	1.87	1.36	5.87	6.19	9.50	5.01	4.16	1.93	1.23	1.07	-.60	-.97
9	1.87	1.37	5.65	5.89	11.73	5.03	4.19	1.96	1.19	.84	-.58	-.82
10	1.86	1.44	5.67	7.49	12.76	4.91	4.18	1.97	1.18	.52	-1.11	-.40
11	1.83	1.39	5.69	8.11	14.10	4.75	3.96	1.97	1.15	.53	-.68	.02
12	1.83	1.43	5.86	7.07	15.24	4.74	3.77	1.98	1.20	.54	-1.03	.07
13	1.82	1.58	9.00	6.83	14.89	5.13	3.74	1.50	1.19	.56	-1.11	.06
14	1.87	1.41	13.22	6.71	13.37	12.64	3.73	1.37	1.27	.57	-.94	-.53
15	1.92	1.48	12.99	6.57	12.31	17.77	3.78	1.21	1.34	.49	-.80	-.88
16	1.79	1.47	10.71	6.50	12.03	17.90	3.77	1.16	1.13	.50	-.81	-1.09
17	1.77	1.43	8.83	6.51	11.86	14.67	3.77	1.23	1.08	.45	-1.31	-.67
18	1.80	1.39	7.90	6.37	11.87	12.81	3.76	1.17	1.12	.48	-.98	.20
19	1.42	1.45	8.26	6.46	11.85	10.44	3.74	1.21	1.16	.46	-.89	.27
20	1.29	1.50	7.82	6.43	11.73	10.99	3.73	1.15	1.15	.43	-.77	.24
21	1.35	2.06	6.28	6.40	11.55	14.08	3.83	1.14	1.16	.39	-.78	.25
22	1.34	5.15	6.04	5.92	11.15	17.95	3.87	1.17	1.10	.46	-.86	.24
23	1.38	5.25	5.99	5.30	10.89	16.86	3.91	1.20	.87	.20	-.83	.23
24	1.39	4.50	6.10	5.36	10.17	15.34	3.90	1.22	.67	.06	-1.30	.22
25	1.36	4.03	6.08	5.37	9.28	12.38	3.83	1.32	.92	.02	-.86	.18
26	1.36	3.54	5.81	5.34	9.26	10.33	2.90	1.22	1.22	.02	-.92	.10
27	1.48	3.51	4.94	5.33	9.09	10.24	2.26	1.23	1.44	.03	-.94	.0
28	1.50	3.57	4.95	5.35	8.85	11.13	2.15	1.12	1.25	.01	-.86	-.71
29	1.44	3.56	4.97	5.32	---	10.29	2.10	1.21	.99	-.05	-.83	-.55
30	1.49	3.63	4.98	5.34	---	7.50	2.09	1.22	.96	-.20	-.91	-.57
31	1.48	---	5.30	5.00	---	5.89	---	1.30	---	-.59	-1.35	---
TOTAL	52.24	67.59	220.56	192.79	280.44	293.28	112.00	47.16	34.29	14.71	-27.60	-11.34
MEAN	1.69	2.25	7.11	6.22	10.02	9.46	3.73	1.52	1.14	.47	-.89	-.38
MAX	2.32	5.25	13.22	8.11	15.24	17.95	5.46	2.16	1.44	1.07	-.58	.27
MIN	1.29	1.36	3.95	5.00	4.80	2.62	2.09	1.12	.67	-.59	-1.35	-1.30

CAL YR 1985 TOTAL 1466.81 MEAN 4.02 MAX 17.64 MIN 1.03
WTR YR 1986 TOTAL 1276.12 MEAN 3.50 MAX 17.95 MIN -1.35

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
05...	1345	9450	134	7.80	19.0	9.0	8.8	96	--	100	48	0
FEB												
07...	1500	21000	126	7.90	15.0	7.3	10.8	108	91	K43	48	3

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
NOV											
05...	0	17	1.4	7.8	25	.5	1.4	50	45	48	59
FEB											
07...	3	17	1.3	6.3	22	.4	1.5	49	44	46	55

DATE	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
NOV											
05...	1.5	8.1	6.2	.10	8.0	78	81	.11	1990	.39	.020
FEB											
07...	1.1	11	6.3	<.10	6.5	73	80	.10	4140	.56	.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
NOV											
05...	.41	.050	.050	.06	1.7	.07	.30	.35	.050	--	.020
FEB											
07...	.57	.020	.010	.01	2.5	.03	--	<.20	.040	.12	.030

DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV											
05...	.020	.06	20	<1	20	<.5	1	<1	<3	<1	31
FEB											
07...	<.010	--	30	<1	19	<.5	<1	<1	<3	1	130

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV											
05...	<1	<4	<1	<.1	<10	1	<1	<1	31	<6	16
FEB											
07...	1	<4	7	<.1	<10	2	<1	<1	28	<6	7

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV											
05...	.7	.7	1.8	.6	1.6	.6	.03	<.04	17	434	--

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	ALKA-LINITY FIELD (MG/L AS CACO3)
MAR APR 24...	1410	14300	123	8.10	20.5	10.5	117	<1	35	50

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)
APR 24...	50	61	50	.8	.38	.010	.39	.030	.030	.04

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
APR 24...	1.7	.03	.47	.50	.040	.12	<.010	<.010	14	541

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
AUG 08...	1750	7400	128	7.80	29.0	5.3	6.0	78	K64	>670	49	2

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)
AUG 08...	2	17	1.6	7.6	24	.5	1.6	47	51	47	57

DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)
AUG 08...	47	1.4	9.0	5.6	.10	5.4	83	76	.11	1660	.020

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
AUG 08...	<.10	.030	.040	.05	.07	.67	.70	.030	.09	.010	<.010

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02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
AUG 08...	20	2	20	<.5	<1	<1	<3	7	6	<5	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
AUG 08...	5	<.1	<10	<1	<1	<1	37	<6	<3	--	--

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV						
05...	1317	1.47	815	9430	14	356
05...	1322	1.47	815	9430	28	713
05...	1333	1.48	965	9450	14	357
05...	1341	1.48	965	9450	13	332
05...	1352	1.49	1090	9470	16	409
05...	1357	1.49	1090	9470	17	435
05...	1408	1.49	1170	9470	22	563
05...	1410	1.49	1170	9470	16	409
05...	1416	1.49	1230	9470	14	358
05...	1418	1.50	1230	9490	15	384
05...	1423	1.51	1310	9510	15	385
05...	1426	1.52	1310	9530	18	463
FEB						
04...	1046	4.78	815	16100	9	391
04...	1049	4.78	815	16100	7	304
04...	1103	4.76	965	16100	6	261
04...	1107	4.76	965	16100	7	304
04...	1116	4.76	1090	16100	8	348
04...	1118	4.76	1090	16100	8	348
04...	1125	4.77	1170	16100	8	348
04...	1128	4.77	1170	16100	8	348
04...	1134	4.77	1200	16100	9	391
04...	1137	4.77	1200	16100	9	391
04...	1149	4.77	1230	16100	10	435
04...	1152	4.76	1230	16100	10	435
04...	1159	4.76	1250	16100	9	391
04...	1202	4.76	1250	16100	9	391
04...	1211	4.76	1310	16100	10	435
04...	1215	4.76	1310	16100	9	391
11...	1251	13.71	815	41000	16	1770
11...	1254	13.72	815	41100	15	1660
11...	1303	13.72	965	41100	17	1890
11...	1305	13.72	965	41100	14	1550
11...	1315	13.74	1090	41100	18	2000
11...	1317	13.76	1090	41200	18	2000
11...	1328	13.82	1170	41400	15	1680
11...	1330	13.83	1170	41500	16	1790
11...	1341	13.85	1200	41600	19	2130
11...	1343	13.86	1200	41600	20	2250
11...	1356	13.94	1230	41900	18	2040
11...	1358	13.96	1230	42000	20	2270
11...	1406	14.06	1310	42400	21	2400
11...	1408	14.09	1310	42500	21	2410
12...	1257	15.27	815	47200	13	1660
12...	1301	15.27	815	47200	15	1910
12...	1312	15.27	965	47200	14	1780
12...	1317	15.27	965	47200	14	1780
12...	1331	15.26	1040	47200	16	2040
12...	1335	15.27	1040	47200	14	1780
12...	1349	15.30	1090	47300	17	2170
12...	1351	15.27	1090	47200	18	2290
12...	1441	15.25	1140	47100	17	2160
12...	1445	15.25	1140	47100	21	2670
12...	1451	15.27	1170	47200	17	2170
12...	1453	15.27	1170	47200	17	2170
12...	1459	15.29	1200	47300	15	1920
12...	1501	15.29	1200	47300	15	1920
12...	1511	15.26	1230	47200	21	2680
12...	1513	15.25	1230	47100	16	2030
12...	1517	15.25	1250	47100	15	1910
12...	1519	15.25	1250	47100	17	2160
12...	1527	15.26	1310	47200	16	2040
12...	1530	15.26	1310	47200	16	2040
18...	1154	11.82	815	34100	12	1100
18...	1157	11.81	815	34000	12	1100
18...	1205	11.82	965	34100	13	1200
18...	1207	11.82	965	34100	16	1470
18...	1213	11.84	1090	34100	13	1200
18...	1217	11.85	1090	34200	12	1110
18...	1226	11.83	1170	34100	13	1200
18...	1230	11.83	1170	34100	15	1380
18...	1238	11.89	1200	34300	13	1200

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

FEB						
18...	1242	11.93	1200	34500	15	1400
18...	1257	11.89	1230	34300	15	1390
18...	1300	11.87	1230	34200	16	1480
18...	1309	11.88	1310	34300	15	1390
18...	1312	11.88	1310	34300	16	1480
24...	1138	10.13	815	29000	11	861
24...	1138	10.13	815	29000	10	783
24...	1146	10.14	965	29000	11	861
24...	1151	10.12	965	28900	10	780
24...	1200	10.11	1090	28900	10	780
24...	1203	10.11	1090	28900	11	858
24...	1212	10.12	1170	28900	11	858
24...	1213	10.12	1170	28900	9	702
24...	1226	10.09	1200	28800	12	933
24...	1230	10.08	1200	28800	11	855
24...	1238	10.08	1230	28800	11	855
24...	1239	10.07	1230	28800	12	933
24...	1244	10.07	1310	28800	11	855
24...	1247	10.07	1310	28800	10	778
MAR						
14...	1435	15.78	815	49300	11	1460
14...	1437	15.78	815	49300	15	2000
14...	1444	15.87	965	49600	12	1610
14...	1447	15.88	965	49700	18	2420
14...	1458	15.92	1090	49900	16	2160
14...	1500	15.93	1090	49900	16	2160
14...	1519	16.01	1170	50200	17	2300
14...	1525	16.04	1170	50400	19	2590
14...	1540	16.09	1200	50600	20	2730
14...	1543	16.10	1200	50600	20	2730
14...	1558	16.15	1230	50800	20	2740
14...	1603	16.17	1230	50900	21	2890
14...	1625	16.24	1310	51200	19	2630
14...	1630	16.25	1310	51200	22	3040
15...	0821	17.62	815	57200	16	2470
15...	0824	17.63	815	57200	16	2470
15...	0830	17.64	965	57200	16	2470
15...	0832	17.64	965	57200	17	2630
15...	0838	17.66	1090	57300	18	2780
15...	0840	17.66	1090	57300	17	2630
15...	0850	17.68	1170	57400	19	2940
15...	0856	17.69	1170	57500	18	2790
15...	0908	17.70	1200	57500	21	3260
15...	0913	17.71	1200	57600	20	3110
15...	0920	17.71	1230	57600	20	3110
15...	0924	17.71	1230	57600	22	3420
15...	0936	17.71	1310	57600	22	3420
15...	0943	17.71	1310	57600	22	3420
16...	0925	18.42	815	60700	21	3440
16...	0928	18.42	815	60700	19	3110
16...	0937	18.43	965	60800	22	3610
16...	0940	18.44	965	60800	24	3940
16...	0952	18.45	1090	60900	22	3620
16...	0956	18.45	1090	60900	24	3950
16...	1008	18.43	1170	60800	23	3780
16...	1013	18.42	1170	60700	26	4260
16...	1023	18.44	1230	60800	28	4600
16...	1030	18.46	1230	60900	26	4280
16...	1043	18.45	1310	60900	27	4440
16...	1047	18.45	1310	60900	30	4930
18...	1025	12.97	815	38200	13	1340
18...	1028	12.98	815	38200	24	2480
18...	1035	12.96	965	38200	16	1650
18...	1037	12.96	965	38200	18	1860
18...	1041	12.97	1090	38200	16	1650
18...	1043	12.97	1090	38200	18	1860
18...	1051	12.97	1170	38200	19	1960
18...	1055	12.97	1170	38200	19	1960
18...	1104	12.96	1230	38200	19	1960
18...	1110	12.93	1230	38100	20	2060
18...	1121	12.93	1310	38100	20	2060
18...	1127	12.94	1310	38100	21	2160
20...	1017	10.78	815	30600	17	1400
20...	1021	10.82	815	30700	18	1490
20...	1028	10.88	965	30900	18	1500
20...	1032	10.91	965	31000	17	1420
20...	1040	10.95	1090	31100	18	1510
20...	1044	10.98	1090	31200	20	1680
20...	1108	11.11	1170	31600	20	1710
20...	1112	11.12	1170	31600	20	1710
20...	1121	11.15	1200	31700	20	1710
20...	1125	11.16	1200	31800	20	1720
20...	1130	11.18	1230	31800	21	1800
20...	1133	11.19	1230	31400	21	1780

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM STAGE (FT ABOVE DATUM)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
MAR						
20...	1141	11.22	1310	32000	21	1810
20...	1143	11.23	1310	32000	22	1900
APR						
24...	1436	3.92	815	14300	12	463
24...	1446	3.90	815	14300	10	386
24...	1459	3.92	965	14300	12	463
24...	1503	3.92	965	14300	12	463
24...	1510	3.91	1090	14300	13	502
24...	1512	3.90	1090	14300	14	541
24...	1519	3.90	1170	14300	15	579
24...	1522	3.90	1170	14300	14	541
24...	1529	3.90	1200	14300	15	579
24...	1532	3.90	1200	14300	15	579
24...	1539	3.90	1230	14300	15	579
24...	1541	3.89	1230	14300	17	656
24...	1550	3.89	1310	14300	16	618
24...	1553	3.89	1310	14300	17	656
JUN						
18...	1302	1.10	815	8700	5	117
18...	1306	1.13	815	8750	6	142
18...	1315	1.20	965	8890	7	168
18...	1318	1.19	965	8870	6	144
18...	1329	1.17	1090	8830	8	191
18...	1331	1.17	1090	8830	9	215
18...	1342	1.15	1170	8790	10	237
18...	1346	1.15	1170	8790	8	190
18...	1354	1.13	1200	8750	7	165
18...	1358	1.12	1200	8730	7	165
18...	1406	1.11	1230	8710	8	188
18...	1409	1.11	1230	8710	7	165
18...	1424	1.28	1310	9050	7	171
18...	1428	1.32	1310	9130	7	173
JUL						
31...	1426	-1.23	870	3960	6	64
31...	1433	-1.23	870	3960	6	64
31...	1445	-1.22	965	3980	6	64
31...	1452	-1.22	965	3980	8	86
31...	1502	-1.21	1020	4000	9	97
31...	1506	-1.21	1020	4000	8	86
31...	1515	-1.19	1070	4040	7	76
31...	1517	-1.17	1070	4090	7	77
31...	1525	-1.06	1140	4320	6	70
31...	1527	-1.05	1140	4340	7	82
31...	1530	-.96	1170	4520	6	73
31...	1532	-.90	1170	4640	7	88
31...	1543	-.50	1200	5470	6	89
31...	1546	-.46	1200	5550	6	90
31...	1552	-.51	1230	5450	7	103
31...	1554	-.53	1230	5410	7	102
31...	1556	-.56	1260	5350	7	101
31...	1558	-.58	1260	5300	7	100
31...	1603	-.59	1310	5280	8	114
31...	1605	-.58	1310	5300	8	114
SEP						
22...	1156	.25	870	7680	3	62
22...	1158	.25	870	7680	3	62
22...	1208	.25	965	7680	3	62
22...	1212	.25	965	7680	2	41
22...	1221	.25	1020	7680	3	62
22...	1223	.25	1020	7680	4	83
22...	1232	.25	1070	7680	3	62
22...	1235	.25	1070	7680	3	62
22...	1242	.25	1140	7680	10	207
22...	1245	.25	1140	7680	7	145
22...	1251	.25	1170	7680	4	83
22...	1256	.25	1170	7680	8	166
22...	1306	.25	1200	7680	5	104
22...	1308	.25	1200	7680	4	83
22...	1315	.25	1230	7680	4	83
22...	1317	.25	1230	7680	5	104
22...	1323	.24	1260	7660	6	124
22...	1325	.24	1260	7660	4	83
22...	1334	.24	1310	7660	5	103
22...	1337	.24	1310	7660	4	83

02358000 APALACHICOLA RIVER AT CHATTAHOOCHEE, FL--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM	BED MAT. SIEVE DIAM. % FINER THAN .500 MM	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM
MAR										
16...	1345	1040	--	4	12	20	34	66	100	--
16...	1355	965	--	1	3	6	12	34	84	100
JUN										
19...	1132	965	1	3	6	17	59	92	100	--
19...	1208	1090	--	8	34	48	55	62	85	100
19...	1222	1200	--	--	2	7	22	57	92	100

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .008 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .031 MM
FEB							
24...	1324	1310	48	52	54	54	58
MAR							
16...	1200	1040	74	85	93	96	99

02358700 APALACHICOLA RIVER NEAR BLOUNTSTOWN, FL

LOCATION.--Lat 30°25'30", long 85°01'53", in NE¼ sec.3, T.1 S., R.8 W., Calhoun County, Hydrologic Unit 03130011, on right bank 500 ft upstream from Neal Lumber Company Landing at McNeal, 0.5 mi upstream from Old River cutoff, 1.5 mi southeast of Blountstown, and 78 mi upstream from mouth.

DRAINAGE AREA.--17,600 mi, approximately.

PERIOD OF RECORD.--January 1920 to September 1957 gage-height records collected in this vicinity by the National Weather Service are in the files of the Geological Survey. Miscellaneous discharge measurements from some periods August 1938 to August 1957 are in files of U.S. Army Corps of Engineers, Mobile, Alabama District. October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 26.96 ft above National Geodetic Vertical Datum of 1929 (National Weather Service bench mark). Prior to Sept. 17, 1921, nonrecording gage near present site at different datum. Sept. 17, 1921 to Aug. 28, 1957, nonrecording gage at several sites within 500 ft of present site at present datum. Since Aug. 26, 1960, auxiliary nonrecording gage at site 2.2 mi upstream at bridge on State Highway 20, at present datum.

REMARKS.--Estimated daily discharges: Nov. 21-25, Dec. 13 to Jan. 6, Jan. 15 to Feb. 24, Mar. 31 to Apr. 3, Apr. 28 to May 5, and July 27 to Aug. 5. Minimum daily gage height may have been exceeded during period of no gage height record.

COOPERATION.--Records from October 1957 to current year, were collected and computed by U.S. Army Corps of Engineers and were reviewed by Geological Survey.

AVERAGE DISCHARGE.--29 years, 23,805 ft^3/s.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172,000 ft^3/s Jan. 29, 1978, gage height, 24.75 ft; minimum daily, 4,680 ft^3/s (estimated) Aug. 3. 1986; minimum daily gage height, 0.02 ft Aug. 18, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1920, 28.6 ft present datum, Mar. 21, 1929, discharge not determined, from National Weather Service records.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 58,600 ft^3/s Mar. 17 (estimated); minimum daily, 4,680 ft^3/s Aug. 3 (estimated).

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11700	10900	16000	19700	16500	23900	18000	10900	9970	9220	5280	5200
2	11800	10600	19200	19400	16500	20400	17400	10800	9900	9240	5380	5760
3	11400	10200	23400	18500	16600	13600	17000	11100	9800	9340	4680	6020
4	11000	9970	25800	20100	16500	13000	16800	10600	9680	9320	5040	6020
5	10900	9800	24600	23900	16600	16800	15600	10600	9730	9390	5550	6000
6	10800	9800	25600	21400	19200	17200	14300	11300	9630	9340	5880	5920
7	10900	9660	23200	21000	21600	16500	14400	11100	9660	9300	6010	5740
8	10700	9610	18800	20200	28000	16600	15200	11200	9780	9290	6100	5130
9	10900	9590	17900	19300	34600	16600	15500	11300	9830	9220	6180	5600
10	10900	9640	17700	20300	38400	16600	15500	11400	9800	8570	5940	5920
11	10900	9660	17700	25000	43600	16300	15400	11300	9730	8340	5560	6900
12	10800	9680	17800	23100	48200	16100	14900	11300	9730	8230	5720	7060
13	10700	9730	27100	21600	46700	16200	14700	11000	9800	8350	5460	7150
14	10700	9780	40100	21000	40600	24100	14700	10400	9900	8390	5640	7110
15	10900	9660	39300	20600	36600	40900	14700	10100	10100	8320	5840	5650
16	10800	9710	31300	20500	35600	58000	14700	9880	9980	8300	5840	5700
17	10700	9700	26300	20500	35000	58600	14700	9870	9610	8390	5620	5500
18	10600	9580	23900	20200	35000	50000	14700	9900	9580	8200	5090	6730
19	10400	9560	24800	20400	35000	40000	14700	10100	9780	8190	5500	7370
20	9780	9440	23700	20300	34500	31600	14700	10200	9750	8060	5760	7490
21	9710	10800	20000	20300	33900	45000	14700	9880	9630	7980	5920	7500
22	9850	17300	19300	19100	32400	50000	14900	9870	9640	7960	5830	7500
23	9760	17500	19200	17600	31700	58800	15000	9800	9490	8030	5770	7500
24	9800	15900	19500	17800	29700	50000	15000	9830	8900	7710	5620	7450
25	9780	14900	19400	17800	26800	40200	15000	9880	8900	7780	5130	7450
26	9750	14000	18800	17700	25600	33100	14300	9930	9320	7550	5600	7400
27	9830	13800	16800	17700	25300	29800	12500	9900	9930	6700	5580	7380
28	10100	13900	16900	17300	25000	30300	11100	9850	10100	6670	5700	6670
29	10300	13900	16900	17700	---	30100	10900	9760	9560	6540	5950	6010
30	10400	14000	16900	17700	---	25700	10900	9900	9220	6240	5900	6130
31	10600	---	17600	17000	---	18500	---	9920	---	5470	5680	---
TOTAL	327160	342270	685500	615200	845700	934300	441900	322870	290430	253620	174730	194960
MEAN	10550	11410	22110	19850	30200	30140	14730	10420	9681	8181	5636	6499
MAX	11800	17500	40100	25000	48200	58800	18000	11400	10100	9390	6180	7500
MIN	9710	9440	16000	17000	16500	13000	10900	9760	8900	5470	4680	5130
CFSM	.60	.65	1.26	1.13	1.72	1.71	.84	.59	.55	.47	.32	.37
IN.	.69	.72	1.45	1.30	1.79	1.97	.93	.68	.61	.54	.37	.41
AC-FT	648900	678900	1360000	1220000	1677000	1853000	876500	640400	576100	503100	346600	386700

CAL YR 1985 TOTAL 5701540 MEAN 15620 MAX 58800 MIN 9440 CFSM .89 IN 12.05 AC-FT 11310000
WTR YR 1986 TOTAL 5428640 MEAN 14870 MAX 58800 MIN 4680 CFSM .85 IN 11.47 AC-FT 10770000

02358754 APALACHICOLA RIVER NEAR WEWAHITCHKA, FL

LOCATION.--Lat 30°08'02", long 85°08'39", NE¼ sec.16, T.4S, R.9 W., Gulf County, Hydrologic Unit 03130011, on right bank at George C. Gaskins State Park, 3.7 mi northeast of Wewahitchka and 44.2 mi upstream from mouth.

DRAINAGE AREA.--17,800 mi^2, approximately.

PERIOD OF RECORD.--January 1950 to February 1954, August 1955 to September 1980, October 1980 to current year. Prior to October 1979, discharge records are available in files of the U.S. Army Corps of Engineers, Mobile, Alabama District.

GAGE.--Water-stage recorder. Datum of gage is 12.136 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Water-stage recorder January 17, 1950, to February 8, 1954, and August 2, 1955, to August 17, 1955, at site 200 ft downstream of present location at datum 3.405 ft higher. Water stage recorder August 17, 1955, to October 18, 1955, at site 200 ft downstream of present location at datum 1.278 ft higher. Water-stage recorder October 18, 1955, to August 30, 1979, at site 200 ft downstream at present datum. Since August 1979, at present site and datum.

REMARKS.--Estimated daily discharges during water year: Oct. 1-3, Nov. 13-21, Jan. 2-8, 20-31, Feb. 5-26, March 12 to April 10, May 7-23, June 9-18, Aug. 23-28, and Sept. 12-30.

COOPERATION.--Records from October 1957, to current year, were collected and computed by U.S. Army Corps of Engineers and were reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 137,000 ft^3/s January 31. 1978, gage height 14.75 ft; minimum 4,590 ft^3/s, gage height -1.56 ft November 5, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of March 1929, reached a stage of 19.20 ft (from flood profile by U.S. Army Corps of Engineers).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 49,400 ft^3/s Feb. 11, estimated; minimum daily discharge, 9,400 ft^3/s June 22, gage height, 0.86 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DATA NOT AVAILABLE AT TIME OF PUBLICATION

02359000 CHIPOLA RIVER NEAR ALTHA, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°32'02", long 85°09'55", in NW¼ sec.32, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, near center of span on downstream side of bridge on State Highway 274, 0.9 mi downstream from Holliman Branch, 3.5 mi southwest of Altha, and 54 mi upstream from mouth.

DRAINAGE AREA.--781 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1912 to December 1913, September 1921 to September 1927, August 1929 to September 1931, March 1943 to current year. Monthly discharge only for some periods published in WSP 1304.

REVISED RECORDS.--WSP 1384: Drainage area. WSP 1504: 1924, 1925 (M), 1926.

GAGE.--Water-stage recorder. Datum of gage is 19.95 ft above National Geodetic Vertical Datum of 1929 (levels by Corps of Engineers). Prior to Jan. 13, 1950, and Mar. 13, 1978 to Mar. 20, 1979, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges during water year: May 21 to July 21. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--51 years (water years 1922-27, 1930-31, 1944-86), 1,495 ft^3/s, 25.99 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s Sept. 20, 1926, gage height, 33.55 ft, from flood marks, from rating curve extended above 12,800 ft^3/s on basis of slope-area measurement of peak flow; minimum, 330 ft^3/s Oct. 31, Nov. 1, 2, 1968; minimum gage height, 8.29 ft Nov. 13-15, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,710 ft^3/s Feb. 12, gage height, 26.05 ft; minimum, 477 ft^3/s Oct. 26-27, gage height, 8.59 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	538	1040	2220	2200	1830	3070	1730	942	840	760	602	615
2	547	1080	2220	2570	1790	2890	1650	933	820	740	590	668
3	587	1230	2160	2580	1790	2720	1590	918	800	730	593	643
4	595	1240	2240	2570	1720	2610	1520	905	820	710	588	637
5	612	1200	2410	2790	1820	2550	1470	898	810	690	602	655
6	607	1140	2480	3080	2730	2480	1420	892	790	670	643	670
7	603	1030	2420	3100	3360	2380	1380	894	780	660	608	658
8	593	923	2280	2830	3690	2320	1340	890	790	650	582	641
9	578	857	2090	2620	4280	2260	1320	886	790	630	572	596
10	566	819	1920	2880	5330	2200	1260	874	800	620	573	592
11	551	795	1770	3460	6930	2130	1240	865	790	620	567	575
12	536	785	1770	3420	8400	2080	1250	857	780	620	567	570
13	521	772	2370	3300	8500	2040	1200	855	790	630	563	569
14	512	757	2970	3300	7830	2770	1190	848	780	640	578	555
15	517	743	3060	3320	7410	3140	1210	828	780	610	596	551
16	521	727	3030	3230	6920	3070	1200	812	790	590	577	552
17	501	719	2980	3010	6170	3100	1200	801	790	570	565	549
18	489	711	2940	2790	5430	3200	1190	793	790	550	564	598
19	491	702	2890	2580	4690	3250	1160	844	810	550	607	587
20	493	724	2740	2430	4230	3240	1120	857	900	540	607	584
21	491	1040	2540	2350	3940	3110	1100	840	880	580	630	580
22	492	3560	2330	2350	3710	2840	1060	810	800	613	575	572
23	489	3460	2160	2280	3610	2570	1050	800	770	623	550	566
24	486	3060	2030	2300	3490	2390	1040	800	750	641	545	559
25	483	2800	1900	2200	3330	2290	1020	800	760	647	540	556
26	479	2730	1790	2120	3260	2180	1000	800	740	657	579	540
27	479	2730	1720	2080	3260	2080	994	800	740	673	560	530
28	578	2690	1690	2060	3210	2000	984	800	740	648	564	518
29	672	2530	1910	2000	---	1920	964	790	750	645	629	509
30	735	2310	1920	1960	---	1860	952	800	760	625	592	499
31	880	---	1900	1890	---	1790	---	830	---	618	605	---
TOTAL	17222	44905	70850	81650	122690	78530	36804	26262	23730	19750	18113	17494
MEAN	556	1497	2285	2634	4382	2533	1227	847	791	637	584	583
MAX	880	3560	3060	3460	8500	3250	1730	942	900	760	843	670
MIN	479	702	1690	1890	1720	1790	952	790	740	540	540	499
CFSM	.71	1.92	2.93	3.37	5.61	3.24	1.57	1.09	1.01	.82	.75	.75
IN.	.82	2.14	3.37	3.89	5.84	3.74	1.75	1.25	1.13	.94	.86	.83
AC-FT	34160	89070	140500	162000	243400	155800	73000	52090	47070	39170	35930	34700

CAL YR 1985 TOTAL 353582 MEAN 969 MAX 3560 MIN 479 CFSM 1.24 IN 16.84 AC-FT 701300
WTR YR 1986 TOTAL 558000 MEAN 1529 MAX 8500 MIN 479 CFSM 1.96 IN 26.58 AC-FT 1107000

02359000 CHIPOLA RIVER NEAR ALTHA, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
06...	1550	1130	166	7.60	18.5	7.7	8.1	84	47	69	72	12
FEB												
07...	1000	3400	122	7.50	12.0	17	7.5	70	K1000	1300	59	15
APR												
24...	0930	1040	211	8.00	18.5	--	7.8	83	K21	K16	--	--
AUG												
08...	1150	580	182	8.20	25.0	1.3	7.7	94	K28	K9	110	7

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
NOV												
06...	12	24	3.0	5.0	13	.3	.70	61	57	61	74	3.0
FEB												
07...	15	20	2.3	2.5	8	.1	.70	45	51	44	54	2.7
APR												
24...	--	--	--	--	--	--	--	46	--	102	124	2.0
AUG												
08...	7	34	4.9	2.6	5	.1	.50	99	102	98	120	1.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV												
06...	7.6	10	<.10	7.7	100	95	.14	305	.45	.010	.46	.060
FEB												
07...	7.9	5.1	<.10	3.7	73	71	.10	670	.46	.010	.47	.030
APR												
24...	--	--	--	--	--	--	--	--	1.2	.010	1.2	.020
AUG												
08...	2.1	4.3	<.10	6.6	122	110	.17	191	--	<.010	1.0	<.010

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV												
06...	.050	.06	--	.03	.54	.60	.040	.12	.020	.010	.03	110
FEB												
07...	.030	.04	2.0	.03	.57	.60	.040	.12	.020	.020	.06	120
APR												
24...	.020	.03	5.3	.03	.18	.20	.020	.06	.010	.010	03	--
AUG												
08...	<.010	.01	--	--	--	.30	.030	.09	.020	.010	.03	<10

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV											
06...	<1	15	<.5	<1	<1	<3	<1	140	<1	<4	10
FEB											
07...	<1	13	<.5	<1	2	<3	<1	210	4	<4	6
APR											
24...	--	--	--	--	--	--	--	--	--	--	--
AUG											
08...	<1	12	<.5	<1	<1	<3	4	15	<5	4	8

02359000 CHIPOLA RIVER NEAR ALTHA, FL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 06...	<.1	<10	2	1	<1	29	<6	8	14	43	57
FEB 07...	<.1	<10	1	<1	<1	24	<6	5	22	202	68
APR 24...	--	--	--	--	--	--	--	--	9	25	44
AUG 08...	<.1	<10	<1	<1	<1	43	<6	7	7	11	29

02359170 APALACHICOLA RIVER NEAR SUMATRA, FL

LOCATION.--Lat 29°56'57", Long 85°00'56", in SW¼ sec.14, T.6 S., R.8 W., Franklin County, Hydrologic Unit 03130011, on left bank at Brickyard Landing, 2.4 mi west of Fort Gadsden, 5.3 mi southwest of Sumatra, and 20.6 mi upstream from mouth.

DRAINAGE AREA.--19,200 mi^2 approximately.

PERIOD OF RECORD.--September 1977 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--No estimated daily discharges. Records good, except those below 15,000 ft^3/s which are tide affected and rated fair.

AVERAGE DISCHARGE.--9 years, 27,207 ft^3/s (19.24 in/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172,000 ft^3/s Feb. 2, 1978, gage height, 12.92 ft estimated from U.S. Army Corps of Engineers flood profile, extended above 103,000 ft^3/s; minimum daily, 5,800 ft^3/s Nov. 4, 5, 1981, estimated; minimum recorded gage height, 1.11 ft Dec. 5, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 58,000 ft^3/s Feb. 15, gage height, 8.17 ft; minimum daily, 6,670 ft^3/s, Aug. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13000	28100	30300	30700	27000	42100	41900	12500	10800	9420	7590	8020
2	13200	26800	30500	32300	26300	40900	39000	12300	11200	9170	7180	7990
3	13200	24800	30300	33700	25500	39700	35400	12000	11100	9060	7270	8090
4	12700	22100	31900	34600	25200	37100	31900	11900	10700	9000	6820	8060
5	11900	18200	34200	35400	25600	32400	28900	12000	10300	9310	6670	8630
6	11000	15800	35800	35500	28000	29300	26000	12100	10200	9310	7460	8840
7	10700	14600	36800	36600	29800	28300	22900	11700	9990	8980	7710	8870
8	10800	13500	37700	37000	33100	27800	20700	11400	9870	8710	7590	8760
9	11000	12900	37900	36600	38300	27300	19900	11400	9900	8760	7750	8660
10	10800	12700	36700	36800	43500	27200	19700	11600	9930	8740	7840	8840
11	11000	12200	34900	37300	46600	26800	19900	11700	9700	8330	7730	8980
12	11400	12000	34500	37900	48900	26300	20000	11700	9610	7950	7970	8870
13	11400	11900	38500	39000	51300	26100	19900	11800	9640	8020	7900	8760
14	11200	11800	41000	39500	53800	27900	19200	11600	9550	8060	7400	8510
15	11200	11900	41100	39400	56700	30500	18700	10900	9840	7970	6990	8480
16	11300	11800	42500	38600	57700	34400	18300	10600	10000	7860	7140	8510
17	11300	11700	44800	37700	56900	39100	17700	10400	10200	7820	7010	8460
18	11200	11200	46400	36900	56500	44500	17600	10600	9700	7880	6880	8180
19	11100	11100	46300	36200	54500	49200	17500	10900	9720	7820	6710	8200
20	10900	10900	44900	35300	52300	51500	17900	11700	10000	7710	7230	8630
21	10900	17300	43100	34500	50700	51100	18500	10900	9990	7840	7900	8760
22	10800	30900	41200	33900	49400	48700	18000	10300	9960	7900	7930	8580
23	10800	35600	39200	33300	48600	47100	17600	10000	10100	8020	7460	8530
24	10800	38800	37200	32200	47700	47300	17800	10000	10000	8150	7080	8630
25	10500	40300	35200	30900	46600	49300	18400	9930	9550	8090	6950	8580
26	10500	40200	33100	30400	45500	51400	18700	9990	9090	8110	7030	8300
27	11000	38200	31800	29200	44500	52200	18300	10200	9220	8330	7160	8090
28	12500	35100	30800	28200	43200	50800	16400	10200	9550	8280	7290	7880
29	14400	32300	29700	28100	---	48000	14600	9810	10100	8200	7570	7790
30	17800	30600	28400	28000	---	45600	13000	9090	10000	8250	7820	7750
31	24300	---	28000	27500	---	43900	---	10200	---	8040	7880	---
TOTAL	374600	645300	1134700	1063200	1213700	1223800	644300	341420	299510	259090	228910	253230
MEAN	12080	21510	36600	34300	43350	39480	21480	11010	9984	8358	7384	8441
MAX	24300	40300	46400	39500	57700	52200	41900	12500	11200	9420	7970	8980
MIN	10500	10900	28000	27500	25200	26100	13000	9090	9090	7710	6670	7750
CFSM	.63	1.12	1.91	1.79	2.26	2.06	1.12	.57	.52	.44	.39	.44
IN.	.73	1.25	2.20	2.06	2.35	2.37	1.25	.66	.58	.50	.44	.49
AC-FT	743000	1280000	2251000	2109000	2407000	2427000	1278000	677200	594100	513900	454000	502300

CAL YR 1985	TOTAL	7428300	MEAN	20350	MAX	51500	MIN	9480	CFSM 1.06	IN 14.39	AC-FT	14730000
WTR YR 1986	TOTAL	7681760	MEAN	21050	MAX	57700	MIN	6670	CFSM 1.10	IN 14.88	AC-FT	15240000

02359224 HUCKLEBERRY CREEK NEAR APALACHICOLA, FL

LOCATION.--Lat 29°44'08", long 85°04'42", in SE¼ sec.31, T.8 S., R.8 W., Franklin County, Hydrologic Unit 03130011, at culvert on County Road 385, 0.2 mi upstream from Apalachicola Northern Railroad Bridge, 0.8 mi north of U.S. Highway 98, 3.2 mi upstream from mouth, and 5.8 mi west of Apalachicola courthouse.

DRAINAGE AREA.--0.9 mi^2, approximately.

PERIOD OF RECORD.--November 1984 to current year.

GAGE.--Water-stage and electromagnetic velocity meter recorders. Elevation of gage is National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Discharge computed from continuous velocity record obtained from recording electromagnetic velocity meter. Records include flow from Apalachicola Wastewater Treatment Plant. Occasional diurnal fluctuation caused by tide.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 106 ft^3/s Sept. 15, 1986; maximum gage height, 4.73 ft Nov. 22, 1985 (Hurricane Kate); no flow for many days in 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 106 ft^3/s Sept. 15, maximum gage height, 4.73 ft Nov. 22; minimum, 0.09 ft^3/s May 1-9, 15-18, June 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	42	4.9	3.4	1.3	1.6	.72	.18	.44	.63	1.1	17
2	.18	20	10	4.0	1.2	1.5	.52	.21	.38	.55	.85	15
3	.18	17	8.9	3.6	1.1	1.4	.43	.17	.31	.58	.78	16
4	.17	12	5.1	6.0	.95	1.5	.46	.16	.36	.52	.70	20
5	.17	8.1	3.4	9.2	1.1	1.6	.50	.15	.29	2.6	.65	14
6	.18	6.3	3.0	8.4	6.6	1.6	.34	.17	.27	9.3	1.2	9.0
7	.23	4.5	2.5	8.3	11	1.5	.41	.17	.26	8.0	1.9	6.0
8	.13	3.0	2.2	6.6	11	1.4	.33	.18	.27	4.2	2.0	2.9
9	.12	2.4	1.9	5.0	14	1.3	.24	.16	.25	2.4	1.7	1.4
10	.15	2.1	1.7	11	20	1.3	.45	.19	.26	2.1	1.3	1.2
11	.12	2.0	1.6	15	16	1.3	.47	.22	.25	1.5	1.0	1.4
12	.12	1.6	1.4	11	13	1.1	.41	.22	.21	1.2	1.1	1.5
13	.12	1.3	11	5.7	8.1	.86	.38	.23	.17	1.1	2.3	1.6
14	.12	1.3	12	4.5	5.6	5.3	.38	.20	.26	.76	2.8	1.5
15	.13	1.5	8.5	3.9	5.8	6.3	.38	.17	.85	.66	4.6	36
16	.13	1.5	5.2	3.4	5.2	5.9	.33	.15	1.5	63	7.2	42
17	.13	1.4	4.0	2.9	4.4	5.3	.33	.14	1.4	.53	5.4	35
18	.14	1.5	3.4	2.6	5.2	4.6	.32	.12	2.2	.50	3.5	24
19	.13	1.4	2.8	2.6	5.5	4.0	.30	2.7	2.5	.42	2.8	21
20	.14	1.4	2.0	2.4	4.9	5.1	.26	4.2	2.9	.33	2.0	15
21	.15	13	1.8	2.0	4.1	6.1	.30	3.9	2.7	.28	1.7	8.2
22	.15	4.6	1.6	1.7	3.5	5.3	.33	1.6	1.7	.23	1.5	5.2
23	.15	1.1	1.6	1.6	3.8	4.9	.28	2.0	1.2	.55	1.3	3.2
24	.21	3.4	1.5	1.5	3.6	4.1	.30	2.2	.92	.52	1.4	1.4
25	.24	5.2	1.6	1.4	3.2	3.4	.19	1.8	.91	.45	1.3	.67
26	.15	5.4	1.5	1.6	2.6	2.8	.19	1.4	.83	.40	.86	.53
27	.17	5.4	1.4	1.7	2.1	2.3	.18	.83	.79	.89	.65	.62
28	.24	4.3	1.4	1.7	1.7	1.8	.21	.63	.80	1.7	1.8	.57
29	1.6	3.5	1.5	1.5	---	1.7	.22	.58	.70	2.1	29	.56
30	29	4.9	1.6	1.4	---	1.6	.20	.54	.64	1.7	23	.51
31	37	---	1.7	1.4	---	1.4	---	.43	---	1.4	20	---
TOTAL	72.02	183.1	112.7	137.0	166.55	89.86	10.36	26.00	26.52	48.73	127.39	302.96
MEAN	2.32	6.10	3.64	4.42	5.95	2.90	.35	.84	.88	1.57	4.11	10.1
MAX	37	42	12	15	20	6.3	.72	4.2	2.9	9.3	29	42
MIN	.12	1.1	1.4	1.4	.95	.86	.18	.12	.17	.23	.65	.51
CFSM	2.58	6.78	4.04	4.91	6.61	3.22	.39	.93	.98	1.74	4.57	11.2
IN.	2.97	7.56	4.65	5.66	6.88	3.71	.43	1.07	1.09	2.01	5.26	12.51
AC-FT	143	363	224	272	330	178	21	52	53	97	253	601

CAL YR 1985	TOTAL	712.48	MEAN 1.95	MAX 58	MIN .00	CFSM 2.17	IN 29.42	AC-FT 1410
WTR YR 1986	TOTAL	1303.19	MEAN 3.57	MAX 42	MIN .12	CFSM 3.97	IN 53.81	AC-FT 2580

Figure 16. Location of stream gaging stations in the Econfina Creek, Choctawhatchee River, Lafayette Creek, Alaqua Creek, and Turkey Creek basins.

02359500 ECONFINA CREEK NEAR BENNETT, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°23'04", long 85°33'24", in SE¼ sec.20, T.1 S., R.13 W., Bay County, Hydrologic Unit 03140101, near center of span on downstream side of bridge on State Highway 388, 0.5 mi downstream from Old Mill Branch, 1.6 mi southwest of Bennett, and 11 mi upstream from mouth.

DRAINAGE AREA.--122 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for October and November 1936, published in WSP 1304.

REVISED RECORDS.--WSP 872: 1937. WSP 1906: Drainage area. WRD FL-80-4: 1979.

GAGE.--Water-stage recorder. Datum of gage is 1.03 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 29, 1962, nonrecording gage and Jan. 30, 1962 to June 16, 1966, water-stage recorder at site 150 ft downstream at present datum. June 17, 1966 to Sept. 28, 1966, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges during water year: Nov. 3, Dec. 1. Records good except for periods of estimated record which are fair. Flow includes large ground-water inflow.

AVERAGE DISCHARGE.--51 years, 535 ft^3/s, 59.55 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,860 ft^3/s Apr. 2, 1948, gage height, 12.46 ft observed, from rating curve extended above 2,200 ft^3/s; minimum, 307 ft^3/s Jan. 9, 1956, gage height, 4.10 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since September 1926, 15.0 ft present datum, from floodmark, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	2200	1110	8.25	Jan. 12	1400	1070	8.08
Nov. 23	0800	*1920	*10.12	Feb. 11	1700	1400	9.03
Dec. 14	2200	1290	8.74	Sept. 5	2000	1090	8.13

Minimum daily, 443 ft^3/s Oct. 26, 27.

02359500 ECONFINA CREEK NEAR BENNETT, FL--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	486	1060	639	862	808	667	591	518	556	505	497	538
2	573	1060	725	885	605	660	593	517	523	505	490	870
3	708	842	709	806	600	674	590	512	502	492	565	853
4	707	629	639	737	596	696	586	511	517	479	622	956
5	584	584	605	829	635	666	581	510	491	471	549	1050
6	521	547	586	856	827	647	578	510	487	470	540	880
7	492	538	567	783	1010	635	577	510	484	475	558	693
8	479	529	558	711	1090	627	576	509	480	471	521	642
9	470	516	558	677	1030	627	570	506	486	466	516	629
10	468	507	590	722	1200	624	565	500	500	465	515	598
11	463	501	587	974	1380	659	565	498	487	468	510	588
12	458	501	611	1050	1300	818	563	500	484	464	570	593
13	452	494	948	927	1020	899	565	500	529	466	577	596
14	451	490	1210	783	872	783	564	500	519	511	529	576
15	451	486	1150	733	848	691	560	497	507	494	590	559
16	449	480	866	709	846	667	559	494	535	481	547	553
17	450	466	748	694	809	664	557	492	557	481	519	572
18	452	468	703	681	799	675	551	490	501	482	536	673
19	445	458	680	680	803	670	548	519	507	472	514	723
20	445	464	665	675	782	653	547	570	667	465	501	607
21	454	598	653	658	753	640	547	548	686	462	532	567
22	450	1320	645	647	741	631	545	513	558	456	535	556
23	462	1800	641	640	757	627	540	501	517	502	498	551
24	452	1250	637	630	764	622	537	495	504	664	480	546
25	445	805	629	625	727	615	536	491	514	594	466	540
26	443	709	625	670	701	609	533	487	514	523	501	531
27	443	677	623	708	691	604	530	484	495	612	597	528
28	486	652	630	668	680	600	528	487	489	582	560	521
29	615	639	711	641	---	595	525	490	482	543	566	517
30	741	629	750	630	---	592	520	487	479	549	548	517
31	842	---	713	617	---	600	---	505	---	525	536	---
TOTAL	15815	20699	21601	22908	23474	20437	18728	15649	15557	15595	16585	19121
MEAN	510	690	697	739	838	659	558	505	519	503	535	637
MAX	842	1800	1210	1050	1380	899	593	570	686	664	622	1050
MIN	443	458	558	617	596	592	520	484	479	456	466	517
CFSM	4.18	5.66	5.71	6.06	6.87	5.40	4.57	4.14	4.25	4.12	4.39	5.22
IN.	4.82	6.31	6.59	6.98	7.16	6.23	5.10	4.77	4.74	4.76	5.06	5.83
AC-FT	31370	41060	42850	45440	46560	40540	33180	31040	30860	30930	32900	37930

CAL YR 1985 TOTAL 185055 MEAN 507 MAX 1800 MIN 376 CFSM 4.16 IN 56.43 AC-FT 367100
WTR YR 1986 TOTAL 224169 MEAN 614 MAX 1800 MIN 443 CFSM 5.03 IN 68.35 AC-FT 444600

02359500 ECONFINA CREEK NEAR BENNETT, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1961 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT 25...	1000	445	96	8.00	19.0	.60	6.8	74	97	40	44	0
FEB 06...	1600	896	58	7.30	18.5	3.4	7.0	75	K1100	800	27	7
APR 30...	1715	320	96	7.60	22.0	--	6.8	78	K17	43	--	--
AUG 07...	0900	567	92	7.70	21.5	2.0	6.1	69	130	240	41	2

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT 25...	0	14	2.2	1.3	6	.0	.20	43	43	43	53	.8
FEB 06...	7	8.7	1.3	1.4	10	.1	.40	22	21	21	25	2.0
APR 30...	--	--	--	--	--	--	--	43	--	42	51	2.0
AUG 07...	2	13	2.0	1.8	9	.1	.20	40	40	38	47	1.5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT 25...	1.5	2.8	<.10	4.6	57	53	.08	68	.16	.020	.18	.110
FEB 06...	8.5	2.5	<.10	3.8	40	39	.05	97	--	.020	<.10	.010
APR 30...	--	--	--	--	--	--	--	--	--	<.010	.10	.010
AUG 07...	4.8	2.6	<.10	4.8	54	52	.07	83	--	<.010	.12	.020

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT 25...	.070	.09	.07	.09	.20	.030	.09	<.010	<.010	--	20
FEB 06...	.010	.01	.07	.29	.30	.020	.06	<.010	.010	.03	130
APR 30...	.030	.04	--	.29	.30	.020	.06	.010	<.010	--	--
AUG 07...	.010	.01	--	.18	.20	.010	.03	<.010	<.010	--	40

02359500 ECONFINA CREEK NEAR BENNETT, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 25...	<1	8	1.3	<1	<1	<3	<1	35	1	<4	1
FEB 06...	<1	9	<.5	<1	<1	<3	<1	100	1	<4	5
APR 30...	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	<1	6	<.5	1	<1	<3	2	41	<5	7	2

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 25...	<.1	<10	<1	<1	<1	37	<6	5	7	8.4	29
FEB 06...	<.1	<10	2	<1	<1	26	<6	14	18	44	33
APR 30...	--	--	--	--	--	--	--	--	7	9.8	43
AUG 07...	--	<10	1	<1	<1	34	<6	4	5	7.7	40

02365500 CHOCTAWHATCHEE RIVER AT CARYVILLE, FL

LOCATION.--Lat 30°46'32", long 85°49'40", in NW¼ sec.10, T.4 N., R.16 W., Holmes County, Hydrologic Unit 03140203, near right bank on downstream side of bridge on U.S. Highway 90, 300 ft downstream from Louisville and Nashville Railroad bridge, 0.8 mi west of Caryville, 1.8 mi downstream from Wrights Creek, and 64 mi upstream from mouth.

DRAINAGE AREA.--3,499 mi^2.

PERIOD OF RECORD.--August 1929 to current year. Gage-height records collected at same site from 1928 to August 1929 are contained in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder. Datum of gage is 39.02 ft above National Geodetic Vertical Datum of 1929. Aug. 17 to Oct. 11, 1929, nonrecording gage at same site and datum; Oct. 12, 1929 to Sept. 11, 1951, water-stage recorder at same site and datum; Sept 12, 1951 to Aug. 11, 1976, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Mar. 15 - Apr. 2, May 1-19, 27-30, and June 6-26. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--57 years, 5,434 ft^3/s, 21.08 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88,000 ft^3/s Apr. 13, 1975, gage height, 18.39 ft; minimum, 604 ft^3/s Sept. 15,16, 1968; minimum gage height, -0.82 ft Sept. 6, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850 (from information furnished by U.S. Army Corps of Engineers, Mobile District) 27.1 ft Mar. 17, 1929, from National Weather Service records and floodmarks; discharge, 206,000 ft^3/s from rating curve extended above 85,000 ft^3/s on basis of slope-area determination of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,500 ft^3/s Mar. 14, gage height, 12.92 ft; minimum, 893 ft^3/s July 14, gage height, 0.21 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	8580	6210	6790	4200	4670	5000	1680	2230	1250	1350	1240
2	1610	9170	8960	8800	4050	4450	4800	1650	2140	1230	1240	1330
3	2660	8780	10900	10200	3940	4430	4550	1630	2020	1170	1150	1520
4	2810	6730	11500	10700	3870	4410	4410	1610	1930	1110	1080	1740
5	3060	4950	10400	10300	4480	4260	4250	1590	1800	1070	1020	2000
6	2920	3940	8280	9880	7780	4080	4090	1580	1700	1040	998	2300
7	2600	3350	6530	9300	12600	3920	3940	1560	1550	1050	1080	2760
8	2210	2990	5350	8160	16200	3790	3820	1540	1450	1050	1050	2230
9	1930	2720	4450	6730	17600	3740	3710	1520	1380	1040	1030	1870
10	1730	2520	3920	6020	17300	3740	3580	1510	1330	991	1070	1640
11	1590	2350	3600	7080	16600	4350	3430	1490	1320	953	1090	1500
12	1480	2250	3730	9620	16900	8940	3280	1480	1320	924	1210	1470
13	1400	2180	5570	11700	13800	17300	3310	1490	1300	912	1270	1570
14	1330	2120	9090	12700	10600	21900	3330	1480	1250	915	1390	1740
15	1300	2070	13800	11400	8710	21500	3460	1490	1220	946	1420	1630
16	1290	2030	18000	8760	8260	21000	3610	1490	1200	928	1460	1470
17	1490	2010	18800	6920	7670	20500	3330	1500	1200	968	1390	1420
18	1690	1970	16500	5980	7170	20100	3060	1600	1210	1100	1360	1450
19	1610	1930	13200	5530	7060	17000	2880	1700	1250	1180	1380	1470
20	1510	1910	10100	5630	6770	13500	2680	2000	1270	1090	1430	1490
21	1440	2060	7510	6480	6510	11000	2490	2590	1230	989	1420	1450
22	1440	3290	5900	6880	6720	9200	2350	2760	1200	999	1470	1410
23	1470	5150	5120	6450	7730	8300	2210	2440	1150	1410	1500	1340
24	1370	5470	4720	5870	8110	7500	2090	2140	1110	1680	1430	1310
25	1330	4820	4460	5410	7370	6900	1990	1990	1100	1400	1290	1230
26	1360	3990	4260	5150	6300	6500	1890	1820	1110	1350	1190	1190
27	1370	3440	4020	5370	5620	6100	1800	1750	1130	1270	1120	1150
28	1400	3090	3890	5480	5130	5800	1770	1700	1220	1590	1080	1110
29	2830	3020	4310	5060	---	5600	1710	1600	1320	1950	1070	1080
30	5400	3590	5370	4610	---	5400	1680	1750	1280	1730	1170	1060
31	7220	---	5930	4380	---	5200	---	1850	---	1500	1260	---
TOTAL	64050	112470	244380	233340	249050	285080	94500	53980	41920	36785	38468	46170
MEAN	2066	3749	7883	7527	8895	9196	3150	1741	1397	1187	1241	1539
MAX	7220	9170	18800	12700	17600	21900	5000	2760	2230	1950	1500	2760
MIN	1200	1910	3600	4380	3870	3740	1680	1480	1100	912	998	1060
CFSM	.59	1.07	2.25	2.15	2.54	2.63	.90	.50	.40	.34	.36	.44
IN.	.68	1.20	2.60	2.48	2.65	3.03	1.00	.57	.45	.39	.41	.49
AC-FT	127000	223100	484700	462800	494000	565500	187400	107100	83150	72960	76300	91580

CAL YR 1985 TOTAL 1355870 MEAN 3715 MAX 27000 MIN 1000 CFSM 1.06 IN 14.42 AC-FT 2689000
WTR YR 1986 TOTAL 1500193 MEAN 4110 MAX 21900 MIN 912 CFSM 1.18 IN 15.95 AC-FT 2976000

02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°27'03", long 85°53'54", in NE¼ sec.36, T.1 N., R.17 W., Walton County, Hydrologic Unit 03140203, near center of main channel on upstream side of bridge on State Highway 20, 4.0 mi southeast of Bruce, 5.8 mi downstream from Holmes Creek, and 21 mi upstream from mouth.

DRAINAGE AREA.--4,384 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1930 to March 1983; Apr. 1983 to May 1984 (discharge measurements only); June 1984 to current year.

REVISED RECORDS.--WSP 872: 1937. WSP 1384: Drainage area. WSP 1504: 1931-34.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1983, water-stage recorder at same site at datum 3.94 ft lower. Prior to Apr. 6, 1934, nonrecording gage at site 1.0 mi downstream at datum 4.19 ft lower.

REMARKS.--No estimated daily discharges during water year. Records fair.

AVERAGE DISCHARGE.--54 years (1931-82, 1985-86), 7,066 ft^3/s, 21.89 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 79,900 ft^3/s Apr. 15, 1975, gage height, 21.48 ft at present datum; minimum, 1,290 ft^3/s Oct. 27, 1968, gage height, 3.46 ft at present datum.

EXTREMES OUTSIDE OF PERIOD OF RECORD.--Flood of March 1929 reached a stage of 25.0 ft at former site and datum, from floodmarks, discharge, 220,000 ft^3/s, from rating curve extended above 80,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 31,300 ft^3/s, Feb. 12, gage height, 16.07 ft; mininum 1,560 ft^3/s, July 17, gage height 4.13 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2220	5700	6830	6870	7190	9620	8320	3270	2600	2000	2330	2020
2	2220	6900	6950	7590	6850	9110	7570	3150	2860	1990	2110	2210
3	2670	8360	7370	8320	6530	8300	7190	3020	2930	1990	1970	2370
4	3450	9570	8340	9370	6280	7740	6850	2930	2830	1910	1900	2520
5	3950	10200	10100	11000	6200	7340	6580	2820	2730	1840	1860	2770
6	4160	9880	11800	12500	6610	6990	6280	2750	2560	1790	1890	3250
7	4210	9000	12400	13400	7210	6810	6060	2670	2440	1760	1840	3660
8	4050	7740	12200	13300	8820	6650	5850	2640	2310	1720	1790	3950
9	3650	6550	10900	12900	12700	6480	5580	2600	2240	1740	1810	3780
10	3210	5440	9600	12500	20000	6280	5420	2580	2190	1690	1800	3410
11	2850	4720	8420	11900	27300	6160	5270	2530	2160	1690	1840	3150
12	2610	4090	7440	11100	30600	5970	5130	2510	2120	1640	1840	2840
13	2460	3830	7270	11000	29800	6080	4980	2460	2160	1590	1950	2610
14	2310	3630	7210	11800	28600	6460	4810	2420	2190	1590	1990	2550
15	2220	3440	7500	13200	26000	7320	4700	2400	2160	1620	2070	2600
16	2140	3360	8850	14700	22100	9280	4660	2390	2060	1640	2190	2560
17	2120	3260	11400	14700	18400	13800	4630	2350	1970	1580	2240	2430
18	2140	3190	15500	13500	15500	21300	4590	2330	1940	1610	2190	2350
19	2310	3090	18600	11800	13600	26800	4610	2380	1980	1630	2110	2330
20	2400	3020	18900	10300	12300	29100	4690	2560	2070	1740	2120	2320
21	2370	3200	17000	9220	11300	28000	4660	2840	2120	1740	2350	2320
22	2310	4970	14700	8510	10600	25500	4510	3300	2150	1680	2390	2310
23	2260	6160	13000	8300	10100	23000	4340	3530	2110	1820	2380	2250
24	2270	6750	10600	8400	9780	18700	4160	3480	2040	2000	2290	2250
25	2240	7300	8930	8510	9570	17500	3970	3210	2000	2200	2190	2200
26	2200	7600	7880	8490	9600	15900	3850	2930	1950	2180	2160	2110
27	2160	8100	7160	8300	9960	13900	3660	2660	1860	2160	2120	2020
28	2230	7860	6800	7940	10000	12300	3550	2490	1830	2090	2030	1970
29	2690	7410	6560	7630	---	11200	3450	2390	1860	2190	2000	1940
30	3270	7040	6370	7550	---	10000	3380	2360	1950	2460	1940	1890
31	4350	---	6270	7480	---	9150	---	2420	---	2530	1980	---
TOTAL	85700	181560	312850	322080	393500	392740	153300	84370	66370	57810	63670	76940
MEAN	2765	6052	10090	10390	14050	12670	5110	2722	2212	1865	2054	2565
MAX	4350	10200	18900	14700	30600	29100	8320	3530	2930	2530	2390	3950
MIN	2120	3020	6270	6870	6200	5970	3380	2330	1830	1580	1790	1890
CFSM	.63	1.38	2.30	2.37	3.21	2.89	1.17	.62	.51	.43	.47	.59
IN.	.73	1.54	2.65	2.73	3.34	3.33	1.30	.72	.56	.49	.54	.65
AC-FT	170000	360100	620500	638800	780500	779000	304100	167300	131600	114700	126300	152600

CAL YR 1985	TOTAL	1828470	MEAN	5010	MAX	26300	MIN	1730	CFSM	1.14	IN	15.52	AC-FT	3627000
WTR YR 1986	TOTAL	2190890	MEAN	6002	MAX	30600	MIN	1580	CFSM	1.37	IN	18.59	AC-FT	4346000

02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL--Continued.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
NOV												
06...	1100	9960	63	7.00	15.5	16	6.5	65	150	150	22	12
FEB												
06...	1000	6550	85	7.70	16.0	7.1	8.3	85	160	59	35	6
APR												
30...	1500	3400	113	7.60	23.0	--	9.8	115	K23	K17	--	--
AUG												
07...	1600	1790	157	8.00	27.0	5.8	6.7	84	K14	K14	66	23

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
NOV												
06...	12	6.8	1.3	2.5	18	.2	1.3	11	16	10	13	2.1
FEB												
06...	6	11	1.7	2.9	15	.2	.90	30	30	28	35	1.1
APR												
30...	--	--	--	--	--	--	--	51	--	50	61	2.4
AUG												
07...	23	21	3.2	4.7	13	.3	1.0	44	64	42	52	.8

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
NOV												
06...	6.6	4.9	<.10	7.3	42	38	.06	1130	--	<.010	.10	.050
FEB												
06...	4.3	5.1	<.10	4.7	58	49	.08	1030	.25	.020	.27	.030
APR												
30...	--	--	--	--	--	--	--	--	--	<.010	.36	.030
AUG												
07...	4.8	6.7	<.10	7.5	87	75	.12	420	--	<.010	.30	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS NO3)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
NOV												
06...	.030	.04	--	--	.45	.50	.040	.12	.020	<.010	--	340
FEB												
06...	.030	.04	1.1	.07	.37	.40	.030	.09	<.010	<.010	--	30
APR												
30...	.050	.06	--	--	.37	.40	.040	.12	.010	.010	.03	--
AUG												
07...	.010	.01	--	--	.87	.90	.030	.09	.020	.010	.03	20

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
NOV											
06...	<1	22	<.5	<1	<1	<3	<1	700	<1	<4	39
FEB											
06...	<1	18	<.5	<1	<1	<3	1	360	1	<4	21
APR											
30...	--	--	--	--	--	--	--	--	--	--	--
AUG											
07...	<1	14	<.5	<1	<1	<3	2	67	<5	7	49

02366500 CHOCTAWHATCHEE RIVER NEAR BRUCE, FL--Continued.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV											
06...	<.1	<10	1	<1	<1	19	<6	9	16	430	50
FEB											
06...	<.1	<10	3	<1	<1	28	<6	17	13	230	69
APR											
30...	--	--	--	--	--	--	--	--	15	138	80
AUG											
07...	<.1	<10	3	<1	1	50	<6	4	12	58	75

02366900 MAGNOLIA CREEK NEAR FREEPORT, FL

LOCATION.--Lat 30°31'48", long 86°05'15", in NW¼ sec.6, T.1 S., R.18 W., Walton County, Hydrologic Unit 03140102, near right bank on downstream side of bridge, 0.5 mi upstream from Lafayette Creek, and 3.5 mi northeast of Freeport.

DRAINAGE AREA.--11.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1968 to September 1971 and October 1974 to September 1978; October 1971 to September 1974 and October 1978 to September 1984 (gage heights, discharge measurements and average discharge); October 1984 to current year (discharge measurements only).

REVISED RECORDS.--WRD FL-77-4: 1969-71, 1975-76 (M).

GAGE.--Nonrecording gage. Datum of gage is 18.31 ft above National Geodetic Vertical Datum of 1929.

AVERAGE DISCHARGE.--13 years (water years 1969-71, 1974-84), 39.1 ft^3/s, 47.43 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,550 ft^3/s Feb. 16, 1970, gage height, 13.62 ft, from rating curve extended above 350 ft^3/s on basis of velocity-area study; minimum, 14 ft^3/s June 29, 30, July 1, 1974, gage height, 4.63 ft.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1968 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L AS CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)
JUN 17...	1150	21	62	--	23.0	25	7.6	14	9	9	3.2
SEP 09...	1215	21	58	6.30	24.0	25	7.5	15	13	13	3.4

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
JUN 17...	1.5	1.3	13	.2	3.2	5.0	--	9.3	5.9	<.10	3.3
SEP 09...	1.6	1.5	15	.2	2.7	2.5	2.4	5.1	5.4	<.10	4.3

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE TOTAL (MG/L AS N)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)
JUN 17...	40	31	.05	2.3	--	<.010	1.4	.030	.37	.40	1.8
SEP 09...	48	26	.07	2.8	1.1	.010	1.1	.020	.22	.24	1.3

DATE	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 17...	8.0	<.010	<.010	11	<1	<1.0	<1.00	<.1	<.1	<.1	<1.0
SEP 09...	5.9	.020	.010	40	--	--	--	--	--	--	--

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 17...	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<10
SEP 09...	--	--	--	--	--	--	--	--	--	--

02366911 LAFAYETTE CREEK AT FREEPORT, FL

LOCATION.--Lat 30°29'35", long 86°07'33", Walton County, Hydrologic Unit 03140102, at bridge on State Highway 20 at Freeport.

DRAINAGE AREA.--35.5 mi^2.

PERIOD OF RECORD.--May 1969 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JUN 17...	1615	62	52	27.0	15	7.0	13	8	8	2.9	1.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)
JUN 17...	1.3	15	.2	2.6	5.0	7.5	5.4	<.10	3.2	44	27

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS NO3)	PHOS-PHORUS, TOTAL (MG/L AS P)
JUN 17...	.06	7.4	<.010	1.1	.030	.47	.50	1.6	7.1	.010

DATE	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	PCB, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PCN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	PER-THANE IN BOTTOM MATERIL (UG/KG)	ENDO-SULFAN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	MIREX, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ALDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	CHLOR-DANE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 17...	.03	<.010	11	<1	<1.0	<1.00	<.1	<.1	<.1	2.0

DATE	DDD, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DDT, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	DI-ELDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	ENDRIN, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	HEPTA-CHLOR EPOXIDE TOT. IN BOTTOM MATL. (UG/KG)	LINDANE TOTAL IN BOT-TOM MA-TERIAL (UG/KG)	METH-OXY-CHLOR, TOT. IN BOTTOM MATL. (UG/KG)	TOXA-PHENE, TOTAL IN BOT-TOM MA-TERIAL (UG/KG)
JUN 17...	1.1	.3	<.1	<.1	<.1	<.1	<.1	<.1	<.1	<10

02367006 ALAQUA CREEK NEAR PORTLAND, FL

LOCATION.--Lat 30°33'22", long 86°10'45", in NE¼ sec.30, T.1 N., R.19 W., Walton County, Hydrologic Unit 03140102, near center on downstream side of bridge on State Highway S-282, 3.2 mi northeast of Portland, and 5.8 mi upstream from mouth.

DRAINAGE AREA.--83.7 mi^2.

PERIOD OF RECORD.--May and July 1977, October 1978 to January 1980 (discharge measurements only), February 1980 to current year.

REVISED RECORDS.--WDR FL-85-4: 1980-84(M).

GAGE.--Water-stage recorder. Datum of gage 1.84 ft above National Geodetic Vertical Datum of 1929 (Vitro Corporation of America bench mark). Prior to Feb. 14, 1980, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Dec. 15-16. Records fair.

AVERAGE DISCHARGE.--6 years, 190 ft^3/s, 30.83 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,320 ft^3/s, Feb. 3, 1982, gage height, 12.38 ft, extended above 2,830 ft^3/s; minimum discharge, 47 ft^3/s June 8, 1985, gage height, 2.67 ft.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 14	1400	*2,850	*11.19	No other peak greater than base discharge.			

Minimum discharge, 57 ft^3/s, Aug. 1, gage height, 2.92 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	108	975	511	569	168	216	198	115	92	117	58	105
2	348	730	507	612	166	210	193	116	86	105	60	90
3	415	379	459	348	163	208	190	112	83	110	70	116
4	288	264	274	269	163	231	186	108	83	83	80	138
5	261	219	231	426	370	258	181	107	85	73	101	152
6	178	198	212	427	1030	214	178	110	83	71	72	183
7	143	187	197	272	1060	199	175	110	81	74	80	129
8	129	180	191	232	714	191	173	107	79	72	82	96
9	122	171	187	212	675	187	170	103	82	66	81	84
10	119	166	179	338	794	185	161	100	87	65	90	82
11	112	162	175	659	809	187	160	100	105	64	80	123
12	106	157	201	578	714	183	160	101	123	62	93	116
13	102	153	445	341	503	318	184	107	164	60	81	153
14	100	150	673	267	393	1940	172	110	121	61	81	104
15	99	149	500	241	402	1160	159	102	106	62	129	87
16	107	148	320	224	366	703	156	98	149	67	160	101
17	103	144	237	215	316	494	149	97	119	81	119	94
18	120	140	223	223	316	393	146	96	93	66	130	124
19	105	136	210	247	300	352	144	205	88	60	95	122
20	101	135	200	215	277	354	142	325	104	58	84	89
21	96	249	194	199	262	358	145	169	93	61	156	78
22	93	662	188	193	261	305	139	125	83	69	129	76
23	98	564	186	189	436	279	134	112	78	82	95	227
24	96	265	184	182	470	264	131	105	75	169	78	160
25	94	207	177	183	296	250	129	101	75	146	70	112
26	92	193	169	280	252	239	128	97	74	91	71	94
27	112	186	169	238	241	232	126	95	77	78	76	85
28	151	181	163	193	226	221	125	94	83	77	74	78
29	257	311	287	186	---	212	122	93	81	68	102	77
30	348	517	232	181	---	209	118	92	90	65	87	105
31	727	---	215	173	---	205	---	92	---	61	88	---
TOTAL	5330	8278	8316	9112	12143	10957	4674	3604	2822	2444	2852	3380
MEAN	172	276	268	294	434	353	156	116	94.1	78.8	92.0	113
MAX	727	975	673	659	1060	1940	198	325	164	169	160	227
MIN	92	135	169	173	163	183	118	92	74	58	58	76
AC-FT	10570	16420	16490	18070	24090	21730	9270	7150	5600	4850	5660	6700

CAL YR 1985 TOTAL 59539 MEAN 163 MAX 975 MIN 48 AC-FT 118100
WTR YR 1986 TOTAL 73912 MEAN 202 MAX 1940 MIN 58 AC-FT 146600

02367310 JUNIPER CREEK AT STATE HIGHWAY 85, NEAR NICEVILLE, FL

LOCATION.--Lat 30°33'26", long 86°31'11", in NW¼ sec.26, T.1 N., R.23 W., Okaloosa County, Hydrologic Unit 03140102, on left bank 20 ft downstream from southbound bridge on State Highway 85, 0.8 mi upstream from Turkey Creek, and 3.0 mi northwest of Niceville.

DRAINAGE AREA.--27.6 mi^2.

PERIOD OF RECORD.--March 1966 to September 1975; October 1975 to April 1977 (discharge measurements only); May 1977 to current year.

REVISED RECORDS.--WDR FL-77-4: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7.78 ft above National Geodetic Vertical Datum of 1929. March 1966 to September 1975, water-stage recorder at site 40 ft upstream at present datum. October 1975 to April 1977, nonrecording gage at site 40 ft upstream at present datum.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--18 years, (water years 1967-75, 1978-86), 90.8 ft^3/s, 44.58 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft^3/s Sept. 23, 1975, gage height, 9.56 ft, extended above 415 ft^3/s; minimum, 37 ft^3/s June 6, 1985; minimum gage height, 5.19 ft Sept. 11, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 31	2100	279	7.57	Mar. 13	2000	*777	*8.77
Dec. 13	1500	250	7.49	May 19	1200	325	7.68
Jan. 1	0400	316	7.66	July 23	2300	334	7.70
Feb. 5	1800	444	7.91				

Minimum discharge, 57 ft^3/s Sept. 28, 29, 30; gage height, 6.07 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	160	104	214	84	104	131	110	89	96	69	72
2	154	108	105	106	84	104	131	110	88	122	72	71
3	87	99	86	95	89	104	132	108	88	134	82	71
4	85	93	81	111	89	113	132	108	88	87	88	75
5	79	88	85	110	268	106	132	108	87	79	79	77
6	72	86	81	92	210	104	133	109	86	76	77	76
7	70	84	79	90	131	103	133	106	85	75	82	68
8	70	83	78	88	138	103	134	105	86	73	74	66
9	69	80	78	88	134	103	135	104	87	72	73	67
10	69	80	76	133	151	104	133	103	103	86	72	65
11	67	78	77	123	169	104	134	103	100	79	97	84
12	67	77	94	94	121	103	140	103	91	72	130	81
13	67	77	187	89	113	396	144	105	86	70	86	71
14	67	77	109	87	110	408	134	101	83	69	83	65
15	74	77	89	90	114	186	132	99	82	68	144	65
16	72	76	87	90	108	165	131	98	90	75	92	66
17	69	75	91	88	109	157	129	97	84	84	104	65
18	69	74	88	89	121	153	127	101	84	70	101	64
19	68	74	79	90	110	151	126	227	91	68	79	63
20	67	74	79	86	102	154	126	127	91	73	108	61
21	66	123	80	86	105	147	126	105	82	73	83	60
22	66	114	80	85	113	142	122	99	81	69	85	80
23	66	82	80	85	138	141	120	97	78	130	75	115
24	65	78	80	84	109	138	119	97	76	174	72	68
25	65	76	78	88	106	137	118	95	75	103	71	64
26	66	76	79	97	106	136	117	95	75	79	71	61
27	80	76	80	87	108	135	116	94	75	84	72	60
28	100	76	100	86	104	133	115	94	76	119	81	59
29	114	107	103	86	---	132	113	92	82	78	78	59
30	168	154	82	85	---	132	111	91	84	73	72	59
31	208	---	110	84	---	132	---	90	---	71	77	---
TOTAL	2582	2682	2785	3006	3442	4530	3826	3281	2553	2681	2629	2078
MEAN	83.3	89.4	89.8	97.0	123	146	128	106	85.1	86.5	84.8	69.3
MAX	208	160	187	214	268	408	144	227	103	174	144	115
MIN	65	74	76	84	84	103	111	90	75	68	69	59
CFSM	3.02	3.24	3.25	3.51	4.46	5.29	4.64	3.84	3.08	3.13	3.07	2.51
IN.	3.48	3.61	3.75	4.05	4.64	6.11	5.16	4.42	3.44	3.61	3.54	2.80
AC-FT	5120	5320	5520	5960	6830	8990	7590	6510	5060	5320	5210	4120

CAL YR 1985 TOTAL 25791 MEAN 70.7 MAX 308 MIN 40 CFSM 2.56 IN 34.76 AC-FT 51160
WTR YR 1986 TOTAL 36075 MEAN 98.8 MAX 408 MIN 59 CFSM 3.58 IN 48.62 AC-FT 71550

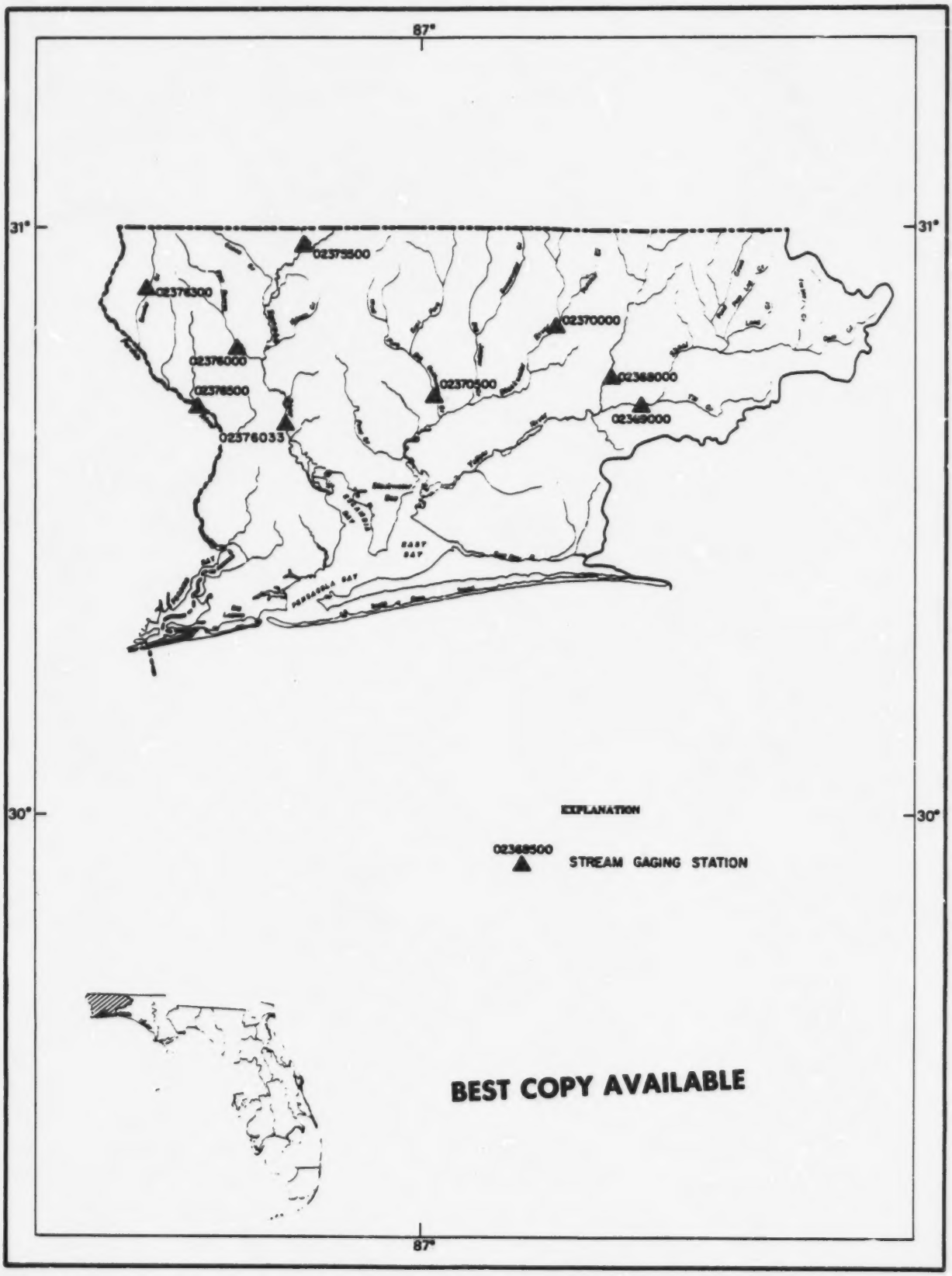

Figure 17. Location of stream gaging stations in the Yellow, Blackwater, Escambia and Perdido River basins.

02368000 YELLOW RIVER AT MILLIGAN, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°45'10", long 86°37'45" in SE¼ sec.15, T.3 N., R.24 W., Okaloosa County, Hydrologic Unit 03140103, near center on downstream side of bridge on U.S. Highway 90, 0.5 mi east of Milligan, 0.5 mi upstream from Trammel Creek, 6.7 mi upstream from Shoal River, and 40 mi upstream from mouth.

DRAINAGE AREA.--624 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 892: 1938-39. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 45.00 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 6, 1939, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Mar. 24-31, April 18-22. Records good, except periods of estimated record, which are fair.

AVERAGE DISCHARGE.--48 years, 1,160 ft^3/s, 25.24 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,600 ft^3/s Apr. 12, 1975, gage height, 17.71 ft; minimum, 131 ft^3/s June 23, 24, 1967 (result of channel work); minimum gage height, 0.59 ft Oct. 21, 22, 24, 25, 30, 1968. Prior to June 23, 1967, minimum discharge, 143 ft^3/s Oct. 25, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1929 reached a stage of 26.2 ft, from information by local residents, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,800 ft^3/s Mar. 16, gage height, 11.85 ft; minimum, 223 ft^3/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	353	2140	1630	2270	999	1000	950	453	527	311	357	329
2	429	1970	2020	2870	960	942	1020	444	490	300	312	340
3	464	1570	2180	3020	926	897	986	428	477	300	304	448
4	501	1260	2130	3160	901	911	939	412	422	292	299	658
5	506	933	1800	3110	1330	951	895	403	389	272	263	715
6	446	749	1200	2550	1970	900	863	400	368	267	255	762
7	395	651	904	2180	2210	843	836	396	351	295	263	678
8	369	583	798	1880	2380	798	812	388	336	268	270	513
9	357	540	736	1560	2460	762	784	381	397	255	270	424
10	344	514	690	1570	2470	742	745	373	591	246	267	370
11	331	491	657	1910	2290	736	718	367	553	242	304	360
12	322	472	1020	2240	2000	735	710	367	706	233	304	355
13	313	458	1740	2660	1850	1230	756	369	643	232	315	390
14	309	445	2600	2800	1680	3050	740	365	517	231	317	408
15	307	438	3400	2430	1530	5390	734	358	433	265	342	368
16	311	431	3640	1850	1540	10600	707	353	390	269	362	350
17	314	421	3380	1500	1700	11100	708	347	370	257	372	362
18	315	410	2650	1330	1680	6630	690	353	352	246	482	373
19	333	402	1840	1260	1530	4040	710	1030	383	245	402	351
20	351	403	1390	1330	1540	2870	640	1180	423	243	349	321
21	345	646	1190	1610	1480	2290	580	1110	398	260	321	344
22	349	919	1080	1920	1390	1800	550	1050	346	283	299	327
23	359	823	1000	2140	1570	1810	571	840	322	386	278	360
24	335	771	956	1880	1650	1710	562	634	315	399	260	347
25	333	686	913	1470	1770	1490	541	525	305	448	252	333
26	341	602	865	1370	1570	1440	522	469	297	355	258	360
27	403	547	823	1380	1250	1240	508	431	282	492	296	363
28	473	522	868	1410	1090	1150	493	411	290	490	283	316
29	876	670	1100	1290	---	1080	484	439	334	468	272	284
30	1160	1260	1280	1150	---	1010	468	538	353	527	255	269
31	1650	---	1520	1050	---	965	---	593	---	454	254	---
TOTAL	13995	22727	48000	60150	45710	71112	21222	16207	12358	9831	9437	12178
MEAN	451	758	1548	1940	1633	2294	707	523	412	317	304	406
MAX	1650	2140	3640	3160	2470	11100	1020	1180	706	527	482	762
MIN	307	402	657	1050	901	735	468	347	282	231	252	269
CFSM	.72	1.22	2.48	3.11	2.62	3.68	1.13	.84	.66	.51	.49	.65
IN.	.83	1.35	2.86	3.59	2.73	4.24	1.27	.97	.74	.59	.56	.73
AC-FT	27760	45080	95210	119300	90680	141100	42090	32150	24510	19500	18720	24160

CAL YR 1985 TOTAL 375482 MEAN 1029 MAX 11800 MIN 266 CFSM 1.65 IN 22.38 AC-FT 744800
WTR YR 1986 TOTAL 342933 MEAN 940 MAX 11100 MIN 231 CFSM 1.51 IN 20.44 AC-FT 680200

02368000 YELLOW RIVER AT MILLIGAN, FL.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1962 to June 1972, October 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	HARD-NESS, NONCAR-BONATE (MG/L CACO3)
OCT												
24...	1100	335	69	7.70	22.0	4.5	7.7	88	150	110	28	1
FEB												
05...	1530	1620	40	7.10	16.0	11	8.8	90	>860	770	15	4
APR												
23...	1200	580	63	7.30	18.0	--	8.5	90	27	27	--	--
AUG												
06...	1220	232	75	7.40	26.0	10	6.9	85	120	150	31	3

DATE	HARD-NESS NONCAR-BONATE (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CAC03)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)
OCT												
24...	1	8.3	1.8	2.4	15	.2	.40	27	27	27	33	1.0
FEB												
05...	4	4.3	1.0	1.9	21	.2	.40	12	11	10	13	1.6
APR												
23...	--	--	--	--	--	--	--	23	--	22	27	2.2
AUG												
06...	3	9.3	1.9	2.1	13	.2	.70	29	30	28	34	2.2

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT												
24...	1.5	4.0	<.10	6.1	45	41	.06	41	.14	.030	.17	<.010
FEB												
05...	4.8	3.5	<.10	4.6	31	27	.04	136	--	<.010	.15	.040
APR												
23...	--	--	--	--	--	--	--	--	--	<.010	.20	.030
AUG												
06...	3.4	3.3	<.10	6.2	48	44	.07	30	--	<.010	.18	<.010

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS NO2)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT											
24...	.040	.05	.10	--	.30	.020	.06	.010	.050	.15	20
FEB											
05...	.040	.05	--	.36	.40	.020	.06	<.010	<.010	--	70
APR											
23...	.030	.04	--	.37	.40	.030	.09	.020	<.010	--	--
AUG											
06...	<.010	.01	--	--	.30	.030	.09	<.010	<.010	--	20

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT											
24...	<1	15	1.6	<1	2	<3	2	270	<1	6	22
FEB											
05...	<1	14	<.5	1	<1	<3	<1	230	1	<4	28
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
AUG											
06...	<1	17	<.5	<1	<1	<3	--	210	--	<4	45

02368000 YELLOW RIVER AT MILLIGAN, FL.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 24...	<.1	<10	<1	<1	<1	18	<6	8	11	9.9	73
FEB 05...	<.1	<10	<5	<1	<1	11	<6	4	35	153	43
APR 23...	--	--	--	--	--	--	--	--	11	17	73
AUG 06...	<.1	<10	2	<1	3	22	<6	18	15	9.4	67

02369000 SHOAL RIVER NEAR CRESTVIEW, FL

LOCATION.--Lat 30°41'50", long 86°34'15", in SW¼ sec.5, T.2 N., R.23 W., Okaloosa County, Hydrologic Unit 03140103, near center of bridge on downstream side of southbound lane on State Highway 85, 3.5 mi downstream from Titi Creek, 4.2 mi south of Crestview, and 7 mi upstream from mouth.

DRAINAGE AREA.--474 mi^2.

PERIOD OF RECORD.--July 1938 to current year.

REVISED RECORDS.--WSP 1274: 1939-40, 1944, 1947, 1950. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 47.21 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 12, 1939 and June 12, 1972 to Aug. 22, 1973, nonrecording gage at same site and datum.

REMARKS.--No estimated discharges. Records good.

AVERAGE DISCHARGE.--48 years, 1,087 ft^3/s, 31.14 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,200 ft^3/s Aug. 1, 1975, gage height, 15.58 ft; minimum, 240 ft^3/s Oct. 17, 18, 1972; minimum gage height, 0.96 ft May 13,14, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 2	1200	3540	7.68	Feb. 12	2300	3650	7.73
Feb. 8	0800	4200	7.96	Mar. 15	2100	*9450	10.18

Minimum daily discharge, 351 ft^3/s Aug. 2, gage height, 2.32 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	509	3110	2840	2200	896	1160	1110	654	683	691	380	619
2	600	2810	3420	3160	880	1110	1090	650	577	554	361	572
3	796	1850	3320	3050	869	1080	1060	635	531	502	531	767
4	991	1210	2580	2060	863	1140	1030	616	536	456	580	1060
5	964	977	1620	2440	1290	1270	1010	608	559	426	444	960
6	753	879	1280	2890	3100	1220	993	616	526	419	400	857
7	607	824	1120	2370	3960	1090	975	617	509	462	413	716
8	553	785	1020	1650	4000	1020	964	609	486	458	417	564
9	525	749	972	1380	3030	984	948	594	488	422	428	527
10	513	728	938	1460	2620	958	915	577	690	392	432	488
11	496	710	906	2200	3170	953	895	567	843	381	454	512
12	476	689	1070	2570	3470	950	895	572	872	372	497	552
13	463	683	2060	2190	3290	1450	989	580	750	358	521	598
14	456	674	2820	1590	2360	5160	997	578	615	356	553	542
15	450	663	2950	1370	1980	8580	925	559	536	402	627	490
16	467	656	2140	1260	1990	7910	883	546	532	372	700	604
17	552	645	1460	1180	1800	4550	852	538	503	374	789	586
18	504	631	1260	1140	1670	2780	830	538	477	390	775	594
19	470	616	1140	1170	1660	2210	815	1190	517	394	594	595
20	464	614	1070	1150	1560	2080	805	1980	646	364	513	486
21	451	885	1010	1080	1440	2180	806	1570	562	363	746	444
22	463	1590	971	1030	1410	2060	789	932	496	423	659	426
23	510	1610	947	992	1880	1790	761	733	463	483	552	714
24	496	1110	934	969	2200	1630	743	658	439	660	465	790
25	460	865	913	956	1790	1530	729	620	453	846	423	554
26	448	788	879	1110	1430	1450	718	594	446	600	404	558
27	522	754	864	1270	1300	1390	708	575	431	550	603	570
28	604	728	924	1110	1230	1330	697	563	455	805	727	485
29	1000	767	1380	988	---	1270	687	564	493	601	681	445
30	1500	1490	1480	954	---	1200	669	585	630	452	601	424
31	2090	---	1240	922	---	1150	---	692	---	409	581	---
TOTAL	20153	31090	47528	49861	57138	64635	26288	21911	16744	14717	16851	18099
MEAN	650	1036	1533	1608	2041	2085	876	707	558	475	544	603
MAX	2090	3110	3420	3160	4000	8580	1110	1980	872	846	789	1060
MIN	448	614	864	922	863	950	669	538	431	356	361	424
CFSM	1.37	2.19	3.23	3.39	4.31	4.40	1.85	1.49	1.18	1.00	1.15	1.27
IN.	1.58	2.44	3.73	3.91	4.48	5.07	2.06	1.72	1.31	1.16	1.32	1.42
AC-FT	39970	61670	94270	98900	113300	128200	52140	43460	33210	29190	33420	35900

CAL YR 1985 TOTAL 317694 MEAN 870 MAX 4450 MIN 301 CFSM 1.84 IN 24.93 AC-FT 630100
WTR YR 1986 TOTAL 385015 MEAN 1055 MAX 8580 MIN 356 CFSM 2.23 IN 30.22 AC-FT 763700

02370000 BLACKWATER RIVER NEAR BAKER, FL

LOCATION.--Lat 30°50'00", long 86°44'05", in SW¼ sec.22, T.4 N., R.25 W., Okaloosa County, Blackwater River State Forest, Hydrologic unit 03140104, near right bank on downstream side of bridge on State Highway 4, 0.3 mi downstream from Red Wash Branch, 3.8 mi northwest of Baker, and 35 mi upstream from mouth.

DRAINAGE AREA.--205 mi^2.

PERIOD OF RECORD.--March 1950 to current year.

REVISED RECORDS.--WSP 1704: 1950 (M), 1951-52.

GAGE.--Water-stage recorder. Datum of gage is 60.5 ft above National Geodetic Vertical Datum of 1929 (from design datum of bridge curb furnished by Florida Department of Transportation).

REMARKS.--No estimated daily discharge. Records good.

AVERAGE DISCHARGE.--36 years, 342 ft^3/s, 22.66 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,200 ft^3/s June 4, 1970, gage height, 25.61 ft; minimum, 60 ft^3/s Sept. 7, 8, 1954; minimum gage height, 1.77 ft July 18-20, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0200	1940	8.71	Jan. 5	0200	1670	7.97
Dec. 13	2200	2470	10.04	Mar. 15	1400	*3860	*13.02
Jan. 1	0800	2850	11.00				

Minimum daily discharge, 81 ft^3/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	1710	778	2530	263	310	236	119	147	109	97	100
2	130	1120	885	1830	254	294	226	116	130	104	91	108
3	125	694	640	1100	247	285	219	112	121	101	109	164
4	121	546	484	1100	244	295	213	109	115	116	163	375
5	115	440	381	1460	419	314	205	108	112	99	116	456
6	109	355	323	1000	885	292	200	109	110	93	99	449
7	106	300	282	731	799	271	195	108	107	129	96	287
8	103	266	256	590	636	257	191	107	104	132	98	205
9	101	249	240	503	616	248	185	104	137	103	105	163
10	99	227	226	710	627	244	178	101	211	92	102	138
11	97	214	217	1280	697	244	172	98	219	89	113	130
12	95	204	598	1100	574	242	175	101	222	88	128	129
13	93	194	2080	772	487	821	195	105	170	83	124	158
14	92	184	2400	580	435	3190	194	105	137	81	120	159
15	92	177	1740	488	489	3690	179	99	121	86	169	136
16	101	173	956	435	489	2490	168	98	115	84	212	140
17	135	166	692	401	436	1190	162	94	114	85	169	130
18	127	158	565	379	446	816	157	113	109	84	223	119
19	121	153	485	407	480	655	152	486	109	86	212	122
20	114	153	427	472	441	612	150	539	126	83	158	126
21	107	289	383	424	400	592	150	326	127	83	131	113
22	103	455	349	375	386	508	148	220	113	174	118	106
23	101	361	327	347	560	439	141	180	104	263	108	153
24	97	276	312	333	542	390	138	157	100	249	108	206
25	96	231	293	325	452	354	135	145	98	204	97	164
26	99	208	273	388	382	328	133	135	95	141	94	169
27	118	196	262	383	351	309	129	130	94	146	106	175
28	167	189	292	332	330	291	128	127	106	190	112	135
29	525	252	425	305	---	271	125	134	115	150	105	114
30	1170	484	392	290	---	259	121	162	127	123	100	105
31	1570	---	632	275	---	248	---	166	---	106	99	---
TOTAL	6352	10624	18595	21645	13367	20749	5100	4811	3815	3756	3882	5234
MEAN	205	354	600	698	477	669	170	155	127	121	125	174
MAX	1570	1710	2400	2530	885	3690	236	539	222	263	223	456
MIN	92	153	217	275	244	242	121	94	94	81	91	100
CFSM	1.00	1.73	2.93	3.41	2.33	3.26	.83	.76	.62	.59	.61	.85
IN.	1.15	1.93	3.37	3.93	2.43	3.77	.93	.87	.69	.68	.70	.95
AC-FT	12600	21070	36880	42930	26510	41160	10120	9540	7570	7450	7700	10380

CAL YR 1985	TOTAL	135457	MEAN 371	MAX 4880	MIN 92	CFSM 1.81	IN 24.58	AC-FT 268700			
WTR YR 1986	TOTAL	117930	MEAN 323	MAX 3690	MIN 81	CFSM 1.58	IN 21.40	AC-FT 233900			

02370500 BIG COLDWATER CREEK NEAR MILTON, FL

LOCATION.--Lat 30°42'30", long 86°58'20", in SW¼ sec.5, T.2 N., R.27 W., Santa Rosa County, Hydrologic Unit 03140104, near right bank on downstream side of bridge on State Highway 191, 3 mi upstream from mouth, and 6.5 mi northeast of Milton.

DRAINAGE AREA.--237 mi^2.

PERIOD OF RECORD.--October 1938 to June 1979, October 1979 to September 1980 (gage heights and discharge measurements only), October 1980 to current year. Monthly discharge only for some periods, published in WSP 1304. Prior to October 1956, published as Coldwater Creek near Milton. October 1956 to September 1957, published as Big Coldwater River near Milton.

REVISED RECORDS.--WSP 892: 1939. WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 9.10 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 2, 1938, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records good.

AVERAGE DISCHARGE.--48 years (water years 1938-78, 1981-86), 540 ft^3/s 30.94 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,000 ft^3/s June 4, 1970, gage height, 21.41 ft, from flood mark; minimum, 156 ft^3/s June 10, 11, 1956; minimum gage height, 0.94 ft Dec. 11, 1938.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base of 2,700 ft^3/s and maximum (*);

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 30	0100	4570	9.43	Mar. 15	0700	* 4800	*10.32
Jan. 2	0200	3010	9.16				

Minimum daily discharge, 255 ft^3/s July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	375	2940	1960	1910	487	498	494	323	633	308	473	314
2	393	2070	1390	2350	482	485	484	323	431	314	390	315
3	400	1260	1070	1190	485	482	479	317	357	313	321	315
4	383	1200	794	1010	483	516	470	310	335	283	328	325
5	371	942	678	1220	724	552	464	309	334	273	296	329
6	350	753	618	1060	1040	504	461	317	324	303	286	453
7	329	668	575	823	980	469	454	319	314	336	287	492
8	317	618	541	730	817	455	449	317	302	313	280	369
9	314	572	518	664	843	455	437	310	295	295	319	320
10	314	539	498	842	848	449	425	302	314	274	424	297
11	311	516	482	1250	813	455	418	299	410	262	528	292
12	305	494	635	1120	732	458	438	310	429	255	609	308
13	302	473	1210	854	637	885	532	397	376	256	545	477
14	304	462	1780	735	598	2690	499	372	323	275	559	419
15	308	452	1250	682	664	3880	447	333	297	316	452	338
16	383	443	828	642	677	1540	420	321	305	379	475	329
17	551	431	704	620	610	972	401	309	313	342	397	360
18	448	419	642	608	623	817	391	359	296	304	363	373
19	449	412	601	627	643	749	383	1090	317	277	345	345
20	396	407	569	649	600	775	381	999	362	293	314	308
21	368	457	542	602	569	837	390	628	357	525	313	287
22	356	613	522	574	589	743	380	469	305	570	326	286
23	350	571	514	560	826	671	365	409	282	633	309	426
24	340	480	507	540	771	636	355	374	270	634	300	468
25	338	447	492	534	629	612	349	350	265	719	285	369
26	339	431	464	618	568	592	345	331	270	519	289	366
27	447	421	449	633	536	576	341	320	267	522	304	330
28	984	429	493	560	521	554	338	332	268	533	329	301
29	2960	525	666	529	---	528	335	351	293	541	325	287
30	3510	1090	611	518	---	515	330	425	326	523	306	278
31	2800	---	671	497	---	503	---	583	---	492	311	---
TOTAL	20095	21535	23274	25751	18795	24853	12455	12508	9970	12172	11388	10476
MEAN	648	718	751	831	671	802	415	403	332	393	367	349
MAX	3510	2940	1960	2350	1040	3880	532	1090	633	719	609	492
MIN	302	407	449	497	482	449	330	299	265	255	280	278
CFSM	2.73	3.03	3.17	3.51	2.83	3.38	1.75	1.70	1.40	1.66	1.55	1.47
IN.	3.15	3.38	3.65	4.04	2.95	3.90	1.95	1.96	1.56	1.91	1.79	1.64
AC-FT	39860	42710	46160	51080	37280	49300	24700	24810	19780	24140	22590	20780

CAL YR 1985 TOTAL 228431 MEAN 626 MAX 8020 MIN 249 CFSM 2.64 IN 35.85 AC-FT 453100
WTR YR 1986 TOTAL 203272 MEAN 557 MAX 3880 MIN 255 CFSM 2.35 IN 31.91 AC-FT 403200

02375500 ESCAMBIA RIVER NEAR CENTURY, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°57'54", long 87°14'03", in NW¼ sec.10, T.5 N., R.30 W., Santa Rosa County, Hydrologic Unit 03140305, on left bank 16 ft downstream from bridge on State Highway 4, 1.2 mi downstream from Escambia Creek, 1.7 mi east of Century, and 52 mi upstream from mouth.

DRAINAGE AREA.--3,817 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1934 to current year.

REVISED RECORDS.-- WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 28.34 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to Jan. 13, 1940, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharge. Records fair. Some gage-height fluctuation during periods of low flow are attributed to regulation by power plants at Point-A Dam, 85.4 mi and Gnatt Dam, 90.1 mi upstream from the gaging station. Due to lagging intakes, nonrecording gage was used in conjunction with recording gage to determine mean gage heights.

AVERAGE DISCHARGE.--52 years, 6,295 ft^3/s, 22.40 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 92,300 ft^3/s Apr. 12, 1975, gage height, 23.32 ft; minimum, 578 ft^3/s Oct. 23, 1968; minimum gage height, 1.30 ft Sept. 15, Oct. 20, 21, 1954.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since 1850, 37.8 ft, March 1929, present datum, discharge not determined, from information by U.S. Army Corps of Engineers, Mobile District.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 37,500 ft^3/s Mar. 21, gage height, 18.25 ft; minimum daily, 941 ft^3/s Aug. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2090	13000	8620	16500	3890	4660	6680	2350	4260	1510	1380	1020
2	2090	12000	9940	20700	3800	4340	6150	2210	3600	1480	1200	1100
3	2180	9090	9050	17200	3720	4080	5730	2040	3270	1470	1370	1310
4	2150	6960	7690	13600	3680	4060	5480	1940	2640	1360	1310	1670
5	1980	5690	6500	10800	5130	4020	5230	1910	2030	1240	1080	3090
6	1830	4440	5600	9050	9600	3930	4900	1840	2010	1270	968	4060
7	1700	3760	5040	7860	14700	3970	4750	1800	1880	1240	941	3940
8	1620	3540	4460	6980	15900	4050	4640	1770	1750	1210	968	3560
9	1630	3130	3850	6270	15200	4020	4470	1720	1720	1120	968	2970
10	1600	2780	3400	6240	13000	4020	4240	1690	1750	1010	1020	2360
11	1530	2570	3270	8810	11400	3820	4020	1630	2110	1040	1220	1920
12	1500	2440	4000	10700	10800	3480	3930	1630	2650	1060	1440	1800
13	1450	2360	12600	9790	10100	3830	3970	1800	2720	959	1520	1980
14	1450	2310	22900	7900	9600	11600	3970	1940	2170	986	1490	1900
15	1450	2190	25900	6660	9510	23700	3820	1840	1720	1110	1610	1600
16	1530	2040	22800	5920	9340	30100	3730	1660	1690	1080	1730	1380
17	1800	2010	19200	5350	8410	31500	3990	1570	1650	1080	1670	1330
18	2180	1950	14800	5120	8060	31500	3910	1700	1560	1100	1610	1360
19	2120	1910	10600	5780	8420	34700	3760	2720	1570	1160	1550	1450
20	2010	1870	8230	7230	8380	35700	3600	4450	1810	1280	1400	1410
21	1860	1870	7080	6500	7790	36600	3480	5080	1740	1250	1220	1270
22	1740	2090	6100	5550	6840	36600	3330	3630	1550	1390	1160	1220
23	1770	2530	5390	5040	6780	34300	2990	3040	1410	1390	1280	1220
24	1830	2210	4910	5020	6780	30600	2950	2570	1410	1840	1250	1520
25	1780	1920	4490	4560	6300	26800	2790	2360	1520	2050	1160	1700
26	1740	1940	4110	4940	5780	23200	2710	2020	1400	2010	1130	1370
27	1910	2010	3790	4990	5330	20600	2600	1800	1230	2050	1190	1260
28	2970	2070	3710	4410	4990	17500	2490	1870	1250	1990	1190	1200
29	6100	3010	4530	4340	---	13600	2460	2200	1260	1530	1160	1060
30	11400	5420	4800	4340	---	9320	2430	3480	1460	1350	1050	1010
31	12700	---	5230	4160	---	7600	---	4990	---	1350	1020	---
TOTAL	81690	111110	262590	242310	233230	507800	119200	73250	58790	41995	39255	54040
MEAN	2635	3704	8471	7816	8330	16380	3973	2363	1960	1355	1266	1801
MAX	12700	13000	25900	20700	15900	36600	6680	5080	4260	2050	1730	4060
MIN	1450	1870	3270	4160	3680	3480	2430	1570	1230	959	941	1010
CFSM	.69	.97	2.22	2.05	2.18	4.29	1.04	.62	.51	.36	.33	.47
IN.	.80	1.08	2.56	2.36	2.27	4.95	1.16	.71	.57	.41	.38	.53
AC-FT	162000	220400	520800	480600	462600	1007000	236400	145300	116600	83300	77860	107200

CAL YR 1985	TOTAL	1831970	MEAN	5019	MAX	32100	MIN	1280	CFSM 1.32	IN 17.85	AC-FT	3634000
WTR YR 1986	TOTAL	1825260	MEAN	5001	MAX	36600	MIN	941	CFSM 1.31	IN 17.79	AC-FT	3620000

02375500 ESCAMBIA RIVER NEAR CENTURY, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1952 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 23...	1430	1770	122	7.50	24.0	6.0	7.5	89	130	29	30
DEC 10...	0800	3400	78	7.50	13.0	17	9.4	89	52	36	22
FEB 05...	0830	5130	83	7.40	14.5	15	9.3	92	300	210	31
APR 22...	1700	3330	108	7.70	20.0	--	8.6	95	77	61	--
JUN 11...	1630	2110	134	7.70	27.0	17	7.2	91	310	270	35
AUG 05...	1900	1080	148	7.60	29.0	8.2	6.3	82	55	36	35

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 23...	0	10	1.2	12	45	1	1.3	31	31	1.8	9.3
DEC 10...	3	7.2	1.0	5.8	35	.6	1.3	20	18	1.2	9.2
FEB 05...	12	10	1.5	5.0	25	.4	.80	22	21	1.5	8.0
APR 22...	--	--	--	--	--	--	--	33	--	1.2	--
JUN 11...	4	12	1.2	11	40	.8	1.3	34	33	1.2	11
AUG 05...	0	12	1.3	16	48	1	1.8	35	35	1.7	17

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT 23...	12	<.10	8.1	80	72	.11	382	.15	.030	.18	.060
DEC 10...	7.1	<.10	9.2	53	53	.07	487	--	<.010	.20	.050
FEB 05...	7.2	<.10	8.2	56	53	.08	776	--	<.010	.22	.070
APR 22...	--	--	--	--	--	--	--	--	<.010	.23	.060
JUN 11...	11	<.10	7.2	77	75	.10	439	.20	.010	.21	.050
AUG 05...	13	.10	7.9	99	91	.13	289	.18	.010	.19	.030

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 23...	.060	.08	.34	.40	.030	.09	.010	<.010	--	50	1
DEC 10...	.050	.06	.45	.50	.030	.09	.010	<.010	--	50	<1
FEB 05...	.040	.05	.43	.50	.030	.09	<.010	<.010	--	--	--
APR 22...	.060	.08	.34	.40	.030	.09	.030	.010	.03	--	--
JUN 11...	.070	.09	.35	.40	.050	.15	<.010	<.010	--	60	<1
AUG 05...	.030	.04	.37	.40	.050	.15	<.010	.010	.03	--	--

02375500 ESCAMBIA RIVER NEAR CENTURY, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 23...	26	.6	<1	<1	<3	4	330	<1	6	32	<.1
DEC 10...	25	<.5	<1	<1	<3	1	440	<1	<4	26	<.1
FEB 05...	--	--	--	--	--	--	--	--	--	--	--
APR 22...	--	--	--	--	--	--	--	--	--	--	--
JUN 11...	28	<.5	<1	<1	<3	3	310	<5	4	32	<.1
AUG 05...	--	--	--	--	--	--	--	--	--	--	--

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 23...	<10	<1	<1	<1	40	<6	<3	19	91	47
DEC 10...	<10	<1	<1	<1	28	<6	<3	25	230	52
FEB 05...	--	--	--	--	--	--	--	39	540	54
APR 22...	--	--	--	--	--	--	--	20	180	60
JUN 11...	<10	3	<1	<1	42	<7	21	30	171	60
AUG 05...	--	--	--	--	--	--	--	11	32	84

02376000 PINE BARREN CREEK NEAR BARTH, FL

LOCATION.--Lat 30°47'55", long 87°22'05", in SW¼ sec.5, T.3 N., R.31 W., Escambia County, Hydrologic Unit 03140305, near right bank 10 ft downstream from Wiggins Bridge on private road, 0.3 mi upstream from Blue Water Creek, 4.0 mi northwest of Barth, and 7.3 mi upstream from mouth.

DRAINAGE AREA.--75.3 mi^2.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1384: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 29.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Aug. 16 to Sept. 30. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--34 years, 157 ft^3/s, 28.49 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,800 ft^3/s, Apr. 14, 1955, from rating extended above 2,100 ft^3/s on basis of a slope-area measurement of peak flow; gage height, 18.0 ft from floodmark; minimum, 51 ft^3/s June 8, 9, 1956; minimum gage height, 3.13 ft Sept. 3, 4, 1956; Oct. 20, 21, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum(*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 30	1400	2490	12.81	Jan. 1	1400	*2940	*13.09
Nov. 30	0800	711	8.49	Mar. 14	0300	941	9.63
Dec. 14	0800	928	9.58	May 19	0100	1590	11.58

Minimum daily discharge, 70 ft^3/s Aug. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	1240	405	1440	126	116	109	89	114	90	77	87
2	141	667	464	792	126	116	107	88	98	91	73	87
3	111	433	272	250	126	117	106	86	93	115	82	88
4	104	249	167	255	126	134	106	85	92	92	75	100
5	99	190	149	284	273	130	103	86	93	118	72	145
6	93	168	139	183	406	119	105	88	90	103	70	110
7	91	155	132	167	254	114	105	87	88	97	72	87
8	89	149	130	156	216	113	103	85	87	87	74	80
9	89	142	128	145	195	112	102	84	93	83	72	80
10	89	139	126	238	173	115	99	83	123	79	92	84
11	87	137	124	354	171	116	99	83	127	78	100	94
12	86	135	181	255	146	115	114	94	120	78	102	98
13	86	133	480	172	137	362	151	103	100	76	86	90
14	86	133	736	153	137	724	116	91	91	80	81	82
15	86	132	254	146	181	331	106	87	87	99	105	78
16	93	131	168	141	153	167	102	85	86	89	170	78
17	91	129	151	140	138	143	99	82	86	147	90	80
18	91	128	142	140	145	131	98	203	85	98	86	78
19	89	126	135	142	167	251	98	989	109	81	82	76
20	89	126	132	139	136	249	102	419	132	76	79	73
21	140	128	130	133	130	182	116	142	109	82	86	73
22	116	126	128	129	155	143	101	115	93	150	92	75
23	94	123	128	137	171	132	97	106	86	98	92	74
24	91	120	129	134	140	127	95	101	83	114	87	79
25	90	121	124	142	126	122	95	98	82	101	100	80
26	90	120	120	223	122	120	94	95	89	86	140	76
27	152	120	123	163	122	117	93	95	84	81	96	74
28	830	126	169	137	120	114	93	148	82	82	82	75
29	1600	253	218	135	---	111	92	149	86	115	80	74
30	2120	556	146	132	---	111	90	139	105	83	82	74
31	1590	---	228	127	---	109	---	130	---	81	84	---
TOTAL	8825	6635	6258	7284	4618	5163	3096	4415	2893	2930	2761	2529
MEAN	285	221	202	235	165	167	103	142	96.4	94.5	89.1	84.3
MAX	2120	1240	736	1440	406	724	151	989	132	150	170	145
MIN	86	120	120	127	120	109	90	82	82	76	70	73
CFSM	3.79	2.94	2.68	3.12	2.19	2.22	1.37	1.89	1.28	1.26	1.18	1.12
IN.	4.36	3.28	3.09	3.60	2.28	2.55	1.53	2.18	1.43	1.45	1.36	1.25
AC-FT	17500	13160	12410	14450	9160	10240	6140	8760	5740	5810	5480	5020

CAL YR 1985 TOTAL 63439 MEAN 174 MAX 2120 MIN 70 CFSM 2.31 IN 31.34 AC-FT 125800
WTR YR 1986 TOTAL 57407 MEAN 157 MAX 2120 MIN 70 CFSM 2.09 IN 28.36 AC-FT 113900

02376033 ESCAMBIA RIVER NEAR MOLINO, FL

LOCATION.--Lat 30°40'05", long 87°16'00", in SE¼ sec.20, T.2 N., R.20 W., Escambia County, Hydrologic Unit 03140305, near right bank on downstream side of bridge on State Highway 184, 4.1 mi northeast of Cottage Hill, and 5.5 mi southeast of Molino.

DRAINAGE AREA.--4,147 mi^2.

PERIOD OF RECORD.--April 1960 to September 1981 (gage heights and discharge measurements only), October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9 ft below National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Daily discharges not computed for days with instantaneous gage heights below 11.5 ft, which are affected by tide. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum measured discharge, 73,500 ft^3/s Apr. 7, 1960, gage height, 23.44 ft; minimum measured, 1,170 ft^3/s Oct. 9, 1980, gage height, 10.84 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,100 ft^3/s Mar. 23, gage height, 18.65 ft; minimum gage height, 9.47 ft July 20.

DISCHARGE IN CUBIC FEET PER SECOND FOR PERIOD OCTOBER 1985 TO SEPTEMBER 1986

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3840	16700	5730	7480	4310	5910	11400	---	3620			---
2	3140	16700	6850	9850	4060	5180	9230	---	4180			---
3	---	16100	8830	16000	3900	4830	7850	---	4280			---
4	---	15100	10500	20200	3990	4610	6990	---	3880			---
5	---	13100	10800	18900	4670	4220	6450	---	3470			---
6	---	10700	10000	15900	5360	4020	5900	---	---			---
7	---	8640	8750	13400	6580	3640	5440	---	---			3600
8	---	6730	7590	11400	9570	3600	5100	---	---			3970
9	---	5340	6690	9940	13100	3880	4480	---	---			4190
10	---	4610	5820	9250	15300	4280	4060	---	---			4050
11	---	3850	5110	8770	15600	4130	4000	---	---			3670
12	---	3270	4980	8520	14500	4380	4020	---	---			---
13	---	---	5570	9320	13100	5400	4170	---	---			---
14	---	---	6630	10600	12000	7030	4090	---	---			---
15	---	---	10900	11000	11600	8680	3890	---	---			---
16	---	---	18600	10100	11100	13000	3520	---	---			---
17	---	---	24100	8820	10700	20700	3230	---	---			---
18	---	---	23700	7760	10400	28000	3200	---	---			---
19	---	---	20200	6890	10000	30400	3340	4270	---			---
20	---	---	16400	6090	9600	31100	3650	4850	---			---
21	---	---	13400	6100	9560	32000	3660	4600	---			---
22	---	---	11000	7100	9760	33800	3000	4840	---			---
23	---	---	9350	7480	9740	34900	---	5020	---			---
24	---	---	8190	6880	9110	34200	---	4040	---			---
25	---	---	6790	6220	8400	31900	---	---	---			---
26	---	---	5390	5780	8040	29000	---	---	---			---
27	3290	---	4730	4970	7650	25600	---	---	---			---
28	5720	---	4510	4840	6890	22600	---	---	---			---
29	7290	3260	4370	5100	---	19900	---	---	---			---
30	10800	4900	4490	4870	---	17100	---	---	---			---
31	14600	---	5480	4470	---	14200	---	2890	---			---
TOTAL	---	---	295450	284000	258590	492190	---	---	---			---
MEAN	---	---	9531	9161	9235	15880	---	---	---			---
MAX	---	---	24100	20200	15600	34900	---	---	---			---
MIN	---	---	4370	4470	3900	3600	---	---	---			---
CFSM	---	---	2.30	2.21	2.23	3.83	---	---	---			---
IN.	---	---	2.65	2.55	2.32	4.42	---	---	---			---
AC-FT	---	---	586000	563300	512900	976300	---	---	---			---

02376033 ESCAMBIA RIVER NEAR MOLINO, FL--Continued

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.42	16.43	13.38	14.05	12.69	13.46	15.24	11.45	12.29	11.15	10.72	11.23
2	11.98	16.44	13.83	14.80	12.56	13.13	14.63	11.20	12.62	10.94	10.72	11.49
3	11.82	16.32	14.50	16.27	12.46	12.96	14.18	10.94	12.67	10.83	10.81	11.20
4	11.77	16.12	15.00	16.95	12.51	12.85	13.88	11.02	12.45	10.88	10.80	11.24
5	11.34	15.66	15.08	16.77	12.88	12.64	13.67	11.25	12.20	10.92	10.80	11.36
6	10.99	15.06	14.86	16.28	13.21	12.53	13.45	11.21	11.93	11.01	10.77	11.80
7	10.95	14.44	14.48	15.74	13.72	12.31	13.25	11.18	11.64	10.87	10.72	12.28
8	11.29	13.78	14.10	15.24	14.72	12.28	13.09	11.17	11.47	10.83	10.69	12.51
9	11.06	13.20	13.76	14.83	15.67	12.45	12.78	10.97	11.44	10.80	10.67	12.62
10	11.11	12.85	13.41	14.63	16.15	12.67	12.55	11.43	11.31	10.78	10.73	12.54
11	11.06	12.43	13.09	14.49	16.21	12.59	12.52	11.49	11.33	10.62	10.71	12.31
12	11.23	12.07	13.03	14.41	15.99	12.73	12.52	11.31	11.40	10.54	11.00	12.00
13	11.27	11.92	13.30	14.65	15.66	13.22	12.61	11.41	11.46	10.50	11.12	11.65
14	11.24	11.74	13.74	15.02	15.41	13.89	12.57	11.47	11.45	10.40	11.13	11.53
15	11.24	11.76	15.08	15.12	15.29	14.45	12.45	11.48	11.42	10.48	11.00	11.56
16	11.24	11.72	16.69	14.87	15.16	15.62	12.23	11.45	11.07	10.55	11.02	11.61
17	11.22	11.68	17.40	14.50	15.05	16.98	12.04	11.47	10.95	10.60	11.03	11.50
18	11.57	11.59	17.35	14.15	14.98	17.80	12.02	11.79	10.96	10.75	10.76	11.36
19	11.68	11.61	16.95	13.84	14.86	18.04	12.12	12.66	11.07	10.66	10.77	11.37
20	11.82	11.38	16.37	13.53	14.74	18.14	12.31	12.97	11.23	10.60	10.91	11.47
21	11.95	12.01	15.73	13.54	14.72	18.25	12.32	12.84	11.30	10.88	11.10	11.27
22	11.92	11.78	15.12	13.92	14.78	18.48	11.90	12.98	11.36	10.92	10.92	11.22
23	11.91	11.54	14.66	14.06	14.78	18.63	11.72	13.05	11.35	10.84	10.73	11.14
24	11.67	11.68	14.30	13.84	14.59	18.53	11.61	12.53	11.26	10.88	10.63	11.35
25	11.56	11.69	13.80	13.58	14.37	18.24	11.71	11.94	11.18	11.01	10.71	11.47
26	11.72	11.71	13.22	13.40	14.25	17.90	11.69	11.69	11.03	11.17	10.83	11.39
27	12.08	11.78	12.90	13.02	14.12	17.56	11.71	11.68	10.91	11.20	10.99	11.20
28	13.36	12.01	12.80	12.96	13.84	17.24	11.67	11.76	10.80	11.14	11.03	11.13
29	13.98	12.06	12.72	13.09	---	16.90	11.54	11.64	10.84	11.36	10.89	11.17
30	15.07	12.99	12.78	12.98	---	16.50	11.49	11.59	11.03	11.19	10.91	11.36
31	15.99	---	13.26	12.77	---	15.93	---	11.82	---	10.86	11.01	---
TOTAL	369.49	387.45	446.69	447.30	405.37	474.80	377.47	362.82	343.42	336.16	336.63	347.33
MEAN	11.92	12.92	14.41	14.43	14.48	15.32	12.58	11.70	11.45	10.84	10.86	11.58
MAX	15.99	16.44	17.40	16.95	16.21	18.63	15.24	13.05	12.67	11.36	11.13	12.62
MIN	10.95	11.38	12.72	12.77	12.46	12.28	11.49	10.94	10.80	10.40	10.63	11.13

CAL YR 1985 TOTAL 4670.99 MEAN 12.80 MAX 17.86 MIN 10.49
WTR YR 1986 TOTAL 4635.03 MEAN 12.70 MAX 18.63 MIN 10.40

02376300 BRUSHY CREEK NEAR WALNUT HILL, FL

LOCATION.--Lat 30°53'21", long 87°32'24", in SE¼ sec. 4, T.4 N., R.33 W., Escambia County, Hydrologic Unit 03140106, near right bank on downstream side of county road bridge, 1,000 ft downstream from Rocky Creek, 2.0 mi west of Walnut Hill, and 7.9 mi upstream from mouth.

DRAINAGE AREA.--49 mi^2, approximately.

PERIOD OF RECORD.--January 1958 to current year.

REVISED RECORDS.--WSP 1906: 1958-60. WDR FL-80-4: 1958-59, 1961, 1963-65, 1967-68, 1970, 1973, 1975-79 (M).

GAGE.--Water state recorder. Datum of gage is 118.32 ft above National Geodetic Vertical Datum of 1929. From Aug. 2, 1978, to May 14, 1985, nonrecording gage at same site and datum. From January 1958 to August 1978, water-stage recorder at present site and datum.

REMARKS.--Estimated daily discharges: Dec. 12 - Feb. 4. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--28 years, 107 ft^3/s, 29.65 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,680 ft^3/s Mar. 31, 1962, gage height, 14.96 ft from rating curve extended above 2,500 ft^3/s; minimum discharge, 36 ft^3/s, Sept. 9-16, 1968; minimum gage height, 2.47 ft Oct. 10, 11, 15-17, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 30	0300	*1760	*10.03	Jan. 1	0600	1690	9.94

Minimum daily discharge, 46 ft^3/s July 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	839	192	1150	82	78	72	59	83	57	60	53
2	80	391	292	372	80	77	71	59	66	58	51	54
3	70	189	138	175	80	77	71	58	62	60	83	56
4	66	143	100	160	100	88	71	57	60	53	63	56
5	63	116	91	185	197	87	70	57	60	56	52	61
6	59	104	87	150	419	79	69	57	60	54	49	88
7	57	97	83	130	180	77	69	57	57	56	48	69
8	56	93	81	120	142	76	69	57	56	53	49	55
9	56	89	80	130	134	75	69	56	61	51	49	51
10	56	86	79	165	108	76	67	55	75	50	52	50
11	55	85	77	235	102	77	67	54	69	49	50	50
12	54	84	130	129	94	76	74	60	67	49	73	55
13	54	82	250	105	89	105	90	71	62	48	60	63
14	53	81	560	98	89	272	75	61	57	46	60	58
15	53	81	180	95	125	150	70	57	56	51	91	51
16	55	81	120	92	101	101	68	56	69	69	125	49
17	64	80	100	90	91	90	66	55	61	68	69	48
18	58	79	94	95	155	83	66	103	56	59	61	50
19	56	79	90	100	131	123	65	408	80	51	55	49
20	53	79	88	95	99	298	66	136	89	49	51	48
21	81	79	86	90	92	165	69	75	77	51	50	47
22	68	78	84	95	90	105	65	65	65	55	51	46
23	62	77	82	100	94	90	64	61	58	51	58	49
24	59	75	82	98	85	84	63	59	54	87	59	47
25	58	75	82	94	82	81	62	57	52	80	52	49
26	58	75	84	120	80	79	62	57	52	62	57	51
27	103	75	100	130	81	78	61	59	51	52	86	48
28	339	132	110	94	80	76	61	99	50	51	60	47
29	842	218	105	88	---	74	61	96	63	48	53	48
30	1340	282	100	82	---	73	60	156	67	48	52	47
31	1010	---	208	80	---	73	---	162	---	76	53	---
TOTAL	5218	4124	4035	4942	3282	3141	2033	2579	1895	1748	1882	1593
MEAN	168	137	130	159	117	101	67.8	83.2	63.2	56.4	60.7	53.1
MAX	1340	839	560	1150	419	296	90	408	89	87	125	88
MIN	53	75	77	80	80	73	60	54	50	46	48	46
CFSM	3.43	2.80	2.65	3.25	2.39	2.06	1.38	1.70	1.29	1.15	1.24	1.08
IN.	3.96	3.13	3.06	3.75	2.49	2.38	1.54	1.96	1.44	1.33	1.43	1.21
AC-FT	10350	8180	8000	9800	6510	6230	4030	5120	3760	3470	3730	3160

CAL YR 1985	TOTAL	41617	MEAN	114	MAX	1500	MIN 42	CFSM 2.33	IN 31.59	AC-FT	82550
WTR YR 1986	TOTAL	36472	MEAN	99.9	MAX	1340	MIN 46	CFSM 2.04	IN 27.69	AC-FT	72340

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL
(National stream-quality accounting network station)

LOCATION.--Lat 30°41'25", long 87°26'25", in NW¼ sec.23, T.4 S., R.6 E., Baldwin County, Ala., Hydrologic Unit 03140106, on right bank 25 ft downstream from bridge on county road, 1,000 ft downstream from Alligator Creek, 0.5 mi southwest of Barrineau Park, and 27 mi upstream from mouth.

DRAINAGE AREA.--394 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1941 to current year.

REVISED RECORDS.--WSP 1384: Drainage area. WDR FL-76-4: 1973-75 (M).

GAGE.--Water-stage recorder. Datum of gage is 25.77 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 22, 1949, nonrecording gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--45 years, 764 ft^3/s 26.34 in/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft^3/s Apr. 15, 1955, gage height, 23.94 ft, from rating curve extended above 11,400 ft^3/s, based on slope-area study made in 1955; minimum, 188 ft^3/s Oct. 12-18, 1973; minimum gage height, 1.24 ft Oct. 1-6, 15-17, 20-25, 28-31, Nov. 1-3, 1968.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 15, 1929, reached a stage of 25.7 ft present datum, from information by local resident (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 31	2100	*8,830	*15.26	Jan. 3	0700	*5,120	*12.21

Minimum discharge, 275 ft^3/s July 20, gage height, 1.70 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	511	7910	1660	2440	540	477	440	334	631	500	438	348
2	614	5550	1840	3560	519	464	431	334	670	498	377	345
3	617	4480	1820	4750	506	460	422	326	447	550	331	407
4	656	3040	1370	2920	500	574	417	320	397	475	353	423
5	574	1660	970	1830	846	606	411	315	388	394	323	435
6	474	1140	735	1290	1470	551	407	314	597	360	295	687
7	426	915	621	1000	1810	504	403	316	506	385	285	746
8	400	807	561	892	1880	479	399	314	390	364	299	627
9	384	729	527	790	1650	460	422	303	381	334	292	519
10	375	677	502	879	1250	451	425	301	437	312	300	422
11	365	642	486	1460	1160	451	415	296	448	296	351	366
12	356	614	573	1490	943	449	423	300	443	290	353	357
13	349	590	1490	1360	754	740	557	335	410	288	354	424
14	343	570	2400	1110	669	2040	558	358	371	282	335	431
15	340	556	3550	872	721	1710	496	343	344	322	765	380
16	342	545	3010	737	757	1310	454	324	335	299	753	344
17	374	532	1500	672	702	1140	422	310	345	318	680	348
18	372	519	962	638	688	832	401	304	330	329	669	416
19	358	509	776	626	775	782	387	1380	324	303	623	352
20	350	502	685	629	728	1100	384	2380	426	282	572	323
21	379	499	634	619	704	1440	410	1480	447	286	491	306
22	414	497	600	596	700	1820	397	961	460	321	406	301
23	402	490	578	582	869	1370	380	710	380	397	401	467
24	388	482	564	596	685	884	368	501	332	381	408	378
25	381	476	545	598	592	679	359	415	311	472	410	345
26	367	472	525	862	544	585	352	382	313	543	426	449
27	427	469	508	889	516	535	347	362	353	438	493	610
28	1450	549	583	822	494	503	342	377	342	365	534	458
29	2960	900	913	770	---	478	339	533	364	387	447	380
30	5370	1690	836	665	---	463	337	647	479	338	381	344
31	8230	---	877	585	---	451	---	734	---	331	353	---
TOTAL	29348	39011	33201	37529	23972	24788	12305	16609	12601	11440	13498	12738
MEAN	947	1300	1071	1211	856	800	410	536	420	369	435	425
MAX	8230	7910	3550	4750	1880	2040	558	2380	831	550	765	746
MIN	340	469	486	582	494	449	337	296	311	282	285	301
CFSM	2.40	3.30	2.72	3.07	2.17	2.03	1.04	1.36	1.07	.94	1.10	1.08
IN.	2.77	3.68	3.13	3.54	2.26	2.34	1.16	1.57	1.19	1.08	1.27	1.20
AC-FT	58210	77380	65850	74440	47550	49170	24410	32940	24990	22690	26770	25270

CAL YR 1985 TOTAL 303597 MEAN 832 MAX 8230 MIN 240 CFSM 2.11 IN 28.66 AC-FT 602200
WTR YR 1986 TOTAL 267038 MEAN 732 MAX 8230 MIN 282 CFSM 1.86 IN 25.21 AC-FT 529700

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1957 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUC-TANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT 22...	1130	419	24	6.00	22.0	1.5	8.0	92	420	65	4
DEC 10...	1300	502	23	5.80	14.5	2.1	9.4	92	76	28	4
FEB 04...	1215	500	22	6.00	15.0	2.8	10.0	100	K21	K9	4
APR 22...	0930	400	20	5.80	18.0	--	9.6	102	57	130	--
JUN 11...	1130	450	22	6.20	21.5	4.5	7.9	90	150	190	4
AUG 05...	1150	323	25	6.10	24.5	3.6	7.5	90	72	K9	5

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	PERCENT SODIUM	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD (MG/L AS CACO3)	ALKA-LINITY LAB (MG/L AS CACO3)	CARBON DIOXIDE DIS-SOLVED (MG/L AS CO2)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 22...	2	.75	.62	2.2	49	.5	.40	4	3.0	4.0	1.4
DEC 10...	3	.74	.53	1.9	48	.4	.40	2	1.0	4.5	3.4
FEB 04...	2	.80	[illegible]0	2.3	53	.5	.30	2	1.0	3.3	2.4
APR 22...	--	--	--	--	--	--	--	3	--	7.1	--
JUN 11...	1	.80	.50	2.0	49	.4	.40	3	2.0	3.3	3.6
AUG 05...	2	.91	.59	2.1	46	.4	.50	2	3.0	3.7	4.2

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
OCT 22...	4.0	<.10	7.6	--	19	.03	21	.23	.030	.26	<.010
DEC 10...	3.9	<.10	8.4	24	20	.03	33	--	<.010	.21	.030
FEB 04...	3.7	<.10	7.2	18	19	.02	24	--	<.010	.22	.030
APR 22...	--	--	--	--	--	--	--	--	<.010	.20	<.010
JUN 11...	3.6	<.10	7.4	23	20	.03	28	--	<.010	.20	<.010
AUG 05...	3.7	<.10	7.8	18	21	.02	16	--	--	--	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS TOTAL (MG/L AS PO4)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)
OCT 22...	.030	.04	--	.30	.090	.28	.070	.070	.21	--	--
DEC 10...	.030	.04	.27	.30	.030	.09	.010	<.010	--	50	<1
FEB 04...	.020	.03	.27	.30	.060	.18	.040	.030	.09	40	<1
APR 22...	<.010	.01	--	.20	.040	.12	.020	.020	.03	--	--
JUN 11...	.020	.03	--	.30	.040	.12	.020	<.010	--	50	<1
AUG 05...	--	--	--	--	--	--	--	--	--	--	--

02376500 PERDIDO RIVER AT BARRINEAU PARK, FL--Continued

WATER-QUALITY RECORDS

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 22...	--	--	--	--	--	--	--	--	--	--	--
DEC 10...	22	<.5	<1	<1	<3	<1	140	<1	<4	26	<.1
FEB 04...	19	<.5	<1	1	<3	1	79	1	<4	20	<.1
APR 22...	--	--	--	--	--	--	--	--	--	--	--
JUN 11...	20	<.5	<1	<1	<3	1	85	<5	<4	17	<.1
AUG 05...	--	--	--	--	--	--	--	--	--	--	--

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 22...	--	--	--	--	--	--	--	12	14	33
DEC 10...	<10	1	<1	<1	5	<6	11	6	8.1	50
FEB 04...	<10	3	<1	<1	8	<6	15	4	5.4	50
APR 22...	--	--	--	--	--	--	--	4	4.3	50
JUN 11...	<10	<1	<1	<1	7	<6	6	9	11	56
AUG 05...	--	--	--	--	--	--	--	8	7.0	62

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As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage and flood-hydrograph partial-record stations are presented in a table of annual maximum stage and discharge. Discharge measurements made at miscellaneous sites for both low flows and high flows are given in a second table.

Crest-stage and flood-hydrograph partial-record stations

The following table contains annual maximum discharges for crest-stage and flood hydrograph stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A flood hydrograph station is a continual-record station that records the river stage of storm events above a base stage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Waccasassa River Basin					
02313400	Waccasassa River near Bronson, Fla.	Lat 29°31'32", long 82°42'58", in NE¼ sec.4,T.12 S., R.16 E., Levy County, Hydrologic Unit 03110101, at bridge on U.S. Highway Alternate 27, 2.5 mi upstream from Little Waccasassa River, 5 mi northwest of Bronson, and 28 mi upstream from mouth. Datum of gage is 40.94 ft above National Geodetic Vertical Datum of 1929. (Florida State Department of Transportation "TBM"). Discontinued Sept. 30, 1986.	[a]229	1966-78 1980-86	09-11-86	5.19	753
		Alapaha River Basin					
02317630	Alapaha River near Jasper, Fla.	Lat 30°31'42", long 83°02'17", in SE¼ sec.32, T.2 N., R.13 E., Hamilton County, Hydrologic Unit 03110202, at bridge on U.S. Highway 41, 5.4 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929.	[ab]1720	1948 1966-77 1979-82 1985-86	02-18-86	74.08	15200
		Suwannee River Basin					
02320860	Rocky Creek near Hague, Fla.	Lat 29°49'02", long 82°22'17", in SW¼ sec.1, T.8 S., R.19 E., Alachua County, Hydrologic Unit 03110206, at downstream side of bridge on County Road NW18C, 0.9 mi east of SR121, 2.7 mi southwest of LaCrosse, 4.6 mi northeast of Hague, and 5 mi above mouth.	14.9	1984-86	02-12-86	5.64	173
[c]02322050	Shiloh Run near Alachua, Fla.	Lat 29°49'06", long 82°28'21", in SW¼ sec.1, T.8 S., R.18 E., Alachua County, Hydrologic Unit 03110206, 6 ft upstream from culvert on County Road S-239, 0.7 mi above mouth, and 2.8 mi northeast of Alachua. Elevation of gage is 125 ft above National Geodetic Vertical Datum of 1929, from topographic map.	0.32	1983-86	07-22-86	5.06	[d]

See footnotes at end of table.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Steinhatchee River Basin					
02324065	California Creek at Salem, Fla.	Lat 29°53'04", long 83°25'17", in SE¼ sec.9, T.7S, R.9E., Taylor County, Hydrologic Unit 03110102, at downstream side of bridge on Fish Creek Road, 0.6 mi west of Salem and 2.8 mi above mouth. Elevation of gage is 37.90 ft above National Geodetic Vertical Datum of 1929, Department of Transportation "TBM".	[a]29	1984-86	01-11-86	37.52	140
		Aucilla River Basin					
02326250	Aucilla River near Aucilla, Fla.	Lat 30°29'31", long 83°43'53", in NW¼ sec.16, T.1 N., R.6 E., Jefferson County, Hydrologic Unit 03110103, at bridge on U.S. Highway 90, 1.3 mi northeast of Aucilla and 48 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929. Discontinued Sept. 30, 1986.	345	1965-86	02-12-86	79.60	3120
02326261	Little Aucilla River near Cherry Lake, Fla.	Lat 30°37'36", long 83°29'44", in SW¼ sec.26, T.3 N., R.8 E., Madison County, Hydrologic Unit 03110103, at culvert on State Highway S253, 5.1 mi northwest of Cherry Lake, and 11.9 mi northwest of Madison. Datum of gage is 97.71 ft above National Geodetic Vertical datum of 1929. (Florida Department of Transportation bench mark.) Discontinued Sept. 30, 1986.	[a]13.9	1970-86	02-12-86	7.56	293
[c]02326372	Palmer Mill Branch at Monticello, Fla.	Lat 30°23'37", long 83°50'42", in SE¼ sec.29, T.2 N., R.5E., Jefferson County, Hydrologic Unit 03110103 on right bank 10 feet upstream from culvert on U.S. Highway 90, 1.5 mi above mouth and 1.5 mi east of Jefferson County Courthouse in Monticello. Elevation of gage is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map.	0.48	1983-86	09-29-86	5.36	72
		St. Marks River Basin					
[c]02326828	Northeast drainage ditch at Capital Circle Tallahassee, Fla.	Lat 30°28'42", long 84°14'12", in SW¼ sec.16, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, on right bank, 20 ft upstream from culverts on Capital Circle Northeast, 2.6 mi north of the Federal Corrections Institution, and 3.9 mi northeast of the Florida Capitol Building at Tallahassee.	3.98	1979-86	10-31-85	17.36	153
[c]02326834	McCord Park Pond drainage ditch at Tallahassee, Fla.	Lat 30°28'05", long 84°15'51", in SE¼ sec.19, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, in right center channel of foot bridge, 2000 ft upstream of McCord Park Pond, 0.8 mi north, northwest of Tallahassee Regional Memorial Hospital at Tallahassee.	1.25	1985-86	10-31-85	6.09	593
[c]02326838	Northeast drainage ditch at Miccosukee Road at Tallahassee, Fla.	Lat 30°27'50", long 84°14'24", in SW¼ sec.21, T.1 N., R.1 E., Leon County, Hydrologic Unit 03120001, on right bank, 20 ft upstream from culverts on Miccosukee Road 0.2 mi east of County Prison Farm, and 3.1 mi northeast of the Florida Capitol Building at Tallahassee. Datum of gage is 58.18 ft above National Geodetic Vertical Datum of 1929.	[f]9.83	1979-86	10-31-85	4.59	291

See footnotes at end of table.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum Date	Annual Maximum Gage height (feet)	Annual Maximum Discharge (ft^3/s)
		St. Marks River Basin--continued					
[c]02326842	Governors Mall drainage ditch at Park Avenue at Tallahassee, Fla.	Lat 30°26'29", long 84°14'41", in SE¼ sec.32, T.1 N, R.1 E., Leon County, Hydrologic Unit 03120001, on left bank on upstream side of culvert on Park Avenue, 1.1 mi west of Federal Corrections Institution, and 2.2 mi east of Florida Capitol Building at Tallahassee. Altutude of gage is 80 ft from topographic map.	1.04	1979-83 1986	10-31-85	6.26	54
[c]02326845	Northeast drainage ditch at Weems Road at Tallahassee, Fla.	Lat 30°27'19", long 84°13'21", in SW¼ sec.27, T.1 N., R.1 E., Leon County, Hydrologic Unit 0312001, on right bank, 10 ft upstream from concrete weir on Weems Road, 3.6 mi east of Florida Capitol at Tallahassee.	17.1[h]	1979-83[i] 1986		4.52	607
[c]02327012	West drainage ditch at Roberts Avenue at Tallahassee, Fla.	Lat 30°25'46", long 84°19'46", in NE¼ sec.4, T.1 S., R.1 W., Leon County, Hydrologic Unit 03120001, on left bank 30 ft upstream from bridge on Roberts Avenue, 0.4 mi northeast of Sabal Palm Elementary School, and 2.9 mi west of the Florida Capitol Building at Tallahassee.	20.9	1979-83 1985-86	08-02-85 09-02-86	9.11 8.93	930[e] 883
[c]023270128	Central drainage ditch at Tennessee Street at Tallahassee, Fla.	Lat 30°26'44", long 84°17'44", in NE¼ sec.35, T.1 N, R.1 W., Leon County, Hydrologic Unit 03120001, in center channel, 250 ft upstream from U.S. Highway 90, one mile northwest of the State Capitol Building, 3.3 miles above the mouth of Munson Slough.	1.27	1986	07-21-86	7.69	566
[c]02327014	St. Augustine Branch at Wahnish Way at Tallahassee, Fla.	Lat 30°25'55", long 84°17'24", in NW¼ sec.1, T.1 S., R.1 W., Leon County, Hydrologic Unit 03120001, on left bank 30 ft upstream from bridge on Wahnish Way, 0.2 mi south of Tallahassee train depot, and 0.6 mi southwest of Florida Capitol Building at Tallahassee. Datum of gage is 64.93 ft above National Geodetic Vertical Datum of 1929.	[g]2.18	1979-86	07-21-86	7.98	956
[c]02327015	Central drainage ditch at Orange Avenue at Tallahassee, Fla.	Lat 30°24'48"; long 84°18'18", in NW¼ sec.11, T.1 S, R.1 W., Leon County, Hydrologic Unit 03120001, on right bank 70 ft upstream from culverts on Orange Avenue, 2.2 mi southwest of the Florida Capitol Building at Tallahassee. Datum of gage is 33.39 ft National Geodetic Vertical Datum of 1929. (Florida Department of Transportation bench mark.)	8.23	1979-81	09-02-86	8.63	2250
[c]302549 084152900	East drainage ditch at Apakin Nene at Tallahassee, Fla.	Lat 30°25'48", long 84°15'29", in NW¼ sec.5, T.1 S., R.1 E., Leon County, Hydrologic Unit 03120001, on left bank, 8 ft up-stream from culvert on Apakin Nene, 0.5 mi southeast of Parkway Shopping Center, and 1.5 mi east of Florida Capitol Building at Tallahassee. Elevation of gage is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map.	0.21	1979-86	02-27-84 08-26-85 10-31-85	5.6 6.2 5.2	121[e] 138[e] 110

See footnotes at end of table.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum Date	Annual Maximum Gage height (feet)	Annual Maximum Discharge (ft^3/s)
		Ochlockonee River Basin					
02327050	Sopchoppy River near Arran, Fla.	Lat 30°13'50", long 84°32'20", in SW¼ sec.8, T.3 S., R.3 W., Wakulla County, Hydrologic Unit 03120003, at bridge on U.S. Forest Service Road 315, 1.3 mi downstream from unnamed tributary, 7.9 mi northwest of Arran, and 34 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929. (Florida Department of Transportation bench mark.) Discontinued Sept. 30, 1986.	48.2	1965-86	02-11-86	55.78	1570
[c]02329181	Mall drainage ditch at Boone Blvd. at Tallahassee, Fla.	Lat 30°28'01", long 84°17'22", in SW¼ sec.24, T.1 N., R.1 W., Leon County, Hydrologic Unit 03120003, on right bank, 20 ft upstream from culvert and weir, and 0.1 mi west of Northwood Mall on Boone Blvd., 2 mi north of Florida Capitol Building at Tallahassee.	0.26	1979-86	08-06-86	10.04	216
02329490	Willacoochee Cr. near Quincy, Fla.	Lat 30°38'13", long 84°30'02", in NE¼ sec.26, T.3 N., R.3 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 161, 1.6 mi southwest of Branchville, and 5.6 mi northeast of Quincy. Datum of gage 106.42 ft above National Geodetic Vertical Datum of 1929.	64.9	1974-77 1979-86	02-10-86	8.15	2640
02329877	Ocklawaha Creek near Wetumpka, Fla.	Lat 30°27'01", long 84°38'36", in SW¼ sec.28, T.1 N., R.4 W., Gadsden County, Hydrologic Unit 0312003, at bridge on State Highway 267, 2.5 mi south of Wetumpka. Elevation of gage is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map.	28.8	1975-77 1979-86	08-09-82 04-23-83 03-06-84 05-22-85 02-11-86	4.29 4.72 6.86 4.16 5.35	331[e] 463[e] 1760[e] 298[e] 728
02330050	Telogia Creek near Greensboro, Fla.	Lat 30°33'34", long 84°43'36", in NW¼ sec.22, T.2 N., R.5 W., Gadsden County, Hydrologic Unit 03120003, at bridge on State Highway 274, 1.2 mi southwest of Greensboro, 1.3 mi upstream from Tallabassee Creek, and 54 mi upstream from mouth. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929. Discontinued Sept. 30, 1986.	28.1	1965-86	02-10-86	94.48	1430
[c]02330119	Hosford Branch at Hosford, Fla.	Lat 30°23'48", long 84°48'32", in NW¼ sec.14, T.1S., R.6 w., Liberty County, Hydrologic Unit 03120002, on right bank 15 ft upstream from culvert on State Highway 20, 0.8 mi northwest of Hosford, and 1.6 mi above mouth. Elevation of gage is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.	0.72	1983-86	11-21-85	8.83	d
		Carrabelle River Basin					
02330400	New River near Sumatra, Fla.	Lat 30°02'19", long 84°50'38", in SE¼ sec.16, T.5 S., R.6 W., Liberty County, Hydrologic Unit 03130013, at bridge on U. S. Forest Service Road 120, 1.8 mi below Cat Branch, 8.2 mi east of Sumatra ,and 29 mi upstream from mouth. Datum of gage is National Geodetic Vertical Datum of 1929. Discontinued Sept. 30, 1986.	157	1965-86	02-12-86	23.91	2790

See footnotes at end of table.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum		
					Date	Gage height (feet)	Discharge (ft^3/s)
		Apalachicola River Basin					
02358998	Holliman Branch near Altha, Fla.	Lat 30°32'43", long 85°09'33", in NW¼ sec.29, T.2 N., R.9 W., Calhoun County, Hydrologic Unit 03130011, attached to culvert headwall on upstream right bank on State Highway 274, 0.5 mi upstream from mouth, and 2.6 mi southwest of Altha. Datum of gage is 54.92 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Discontinued Sept. 30, 1986.	2.04	1959-86	01-11-86	8.02	564
02359035	Fourmile Creek at Clarksville, Fla.	Lat 30°26'41", long 85°10'59", in NW¼ sec.31, T.1 N., R.9 W., Calhoun County, Hydrologic Unit 03130012, near right bank on downstream side of bridge on State Highway 73, 0.6 mi north of Clarksville and 1.5 mi above the mouth. Datum of gage is 36.88 ft above National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark).	36.0	1980-86		<9.56	<1080
		Choctawhatchee River Basin					
02365237	Fowler Branch near Leonia, Fla.	Lat 30°55'17", long 85°56'01", in NW¼ sec.22, T.6 N., R.17 W., Holmes County, Hydrologic Unit 03140203, at culvert on State Highway 160, 0.6 mi upstream from mouth, 5.0 mi east of Leonia, and 13.2 mi north of Ponce de Leon. Datum of gage is 75.90 ft above National Geodetic Vertical Datum of 1929. (Florida State Department of Transportation headwall elevation.) Discontinued Sept. 30, 1986.	5.09	1969-86	03-13-86	7.44	2.90
02365435	Wrights Creek near Bonifay, Fla.	Lat 30°51'56", long 85°41'41", in SW¼ sec.1, T.5 N., R.15 W., Holmes County, Hydrologic Unit 03140203, at left bank on downstream side of bridge on State Highway 177, 2.5 mi upstream from Tenmile Creek, 4.9 mi north of Bonifay, and 14.5 mi upstream from mouth.	72.4	1981-86	03-15-86	11.63	2010
02365470	Wrights Creek at SR 177A near Bonifay, Fla.	Lat 30°51'25", long 85°45'44", in NW¼ sec.8, T.5 N., R.15 W., Holmes County, Hydrologic Unit 03140203, on right downstream side of bridge on State Highway 177-A, 7.3 mi upstream of mouth and 7.6 mi northwest of Bonifay. Elevation of gage is 55 ft above National Geodetic Vertical Datum of 1929, from topographic map.	148	1983-86	02-06-86	10.46	[d]
02365700	Sandy Creek at Ponce de Leon, Fla.	Lat 30°43'28", long 85°56'12", in SE¼ sec.28, T.4 N., R.17 W., Holmes County, Hydrologic Unit 03140203, at bridge on State Highway 81 at Ponce de Leon and 10 mi upstream from mouth. Datum of gage is 42.94 ft above National Geodetic Vertical Datum of 1929.	[a]80.7	1961-86	03-14-86	10.51	1980
02366000	Holmes Creek near Vernon, Fla.	Lat 30°37'35", long 85°42'45", in NE¼ sec.35, T.3 N., R.15 W., Washington County, Hydrologic Unit 03140203, near left bank on downstream side of bridge on State Highway 79 at Vernon, 0.2 mi downstream from Pippin Mill Creek and 25 mi upstream from mouth. Datum of gage is 10.70 ft above National Geodetic Vertical Datum of 1929.	386	1950-81[i] 1982-85[j] 1986	02-12-86	21.15	8480

See footnotes at end of table.

Annual maximum discharge at crest-stage and flood-hydrograph partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of Record	Annual Maximum Date	Annual Maximum Gage height (feet)	Annual Maximum Discharge (ft^3/s)
		Choctawhatchee River Basin--continued					
02366859	Pate Branch near Freeport, Fla.	Lat 30°28'44", long 86°24'05", in SW¼ sec.20, T.1 S., R.18 W., Walton County, Hydrologic Unit 03140203, at culvert on State Highway 20, 0.6 mi upstream from Turnpike Branch, and 4.0 mi southeast of Freeport. Datum of gage is 5.02 ft above National Geodetic Vertical Datum of 1929. Discontinued Sept. 30, 1986.	1.87	1969-86	03-14-86	9.02	150
		Blackwater River Basin					
02370250	Big Juniper Creek near Spring Hill, Fla.	Lat 30°47'06", long 86°53'28" in NE¼ sec.12, T.3 N., R.27 W., Santa Rosa County, Hydrologic Unit 03140104, near center of channel on upstream side of bridge, 2.5 mi downstream from Sweetwater Creek, 3.2 mi east of Spring Hill, 8.3 mi above mouth, and 8.7 mi northwest of Harold. Elevation of gage is 33 ft above National Geodetic Vertical Datum of 1929, from topographic map.	113	1981-86	03-13-86	10.31	d
02370550	Clear Creek near Milton, Fla.	Lat 30°39'55", long 87°00'17" in SW¼ sec.24, T.2 N., R.28 W., Santa Rosa County, Hydrologic Unit 03140104, on downstream side of bridge on State Highway 191, 1.2 mi above mouth and 3.0 mi northwest of Milton.	24.0	1984-86	05-19-86	7.34	409
		Carpenter Creek Basin					
02376079	Carpenter Creek at Pensacola, Fla.	Lat 30°28'15", long 87°12'48", in land grant 50, T.1 S., R.30 W., Escambia County, Hydrologic Unit 03140107, at culvert on State Highway S289, 0.9 mi upstream from mouth at Bayou Texar, Pensacola. Datum of gage is 3.11 ft above National Geodetic Vertical Datum of 1929. Discontinued Sept. 30, 1986.	8.84	1971-86	10-29-85	12.28	1230

a Approximately
b Does not include Little Alapaha River
c Flood-hydrograph Station
d Not determined
e Corrected
f Of which 0.19 mi^2 is noncontributing
g Of which 0.12 mi^2 is noncontributing
h Of which 1.2 mi^2 is noncontributing
i Operated as continual record-gaging station
j Miscellaneous discharge measurements only

Discharge measurements made at miscellaneous sites during water year 1986

Spring	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
APALACHICOLA RIVER BASIN						
Mosquito Creek (02358519)	Apalachicola River	Lat 30°41'19", long 84°50'30", in NE¼ sec.4, T.3 N., R.6 W., Gadsden County, Hydrologic Unit 03130011, at bridge on State Highway 269, 0.2 mi north of River Junction, FL.	86.2	1975-76 1984	09-18-86	52
Flat Creek (02358600)	Apalachicola River	Lat 30°37'43", long 84°50'06", in SE¼ sec.28, T.3 N., R.6 W., Gadsden County, Hydrologic Unit 03130011, at bridge on State Highway 269, 5.3 mi south of Chattahoochee and 6.1 mi upstream from mouth.	24.9	1961 1964-69 1974-77 1984	09-18-86	19
Apalachicola River near Sneads (02358634)	Apalachicola Bay	Lat 30°38'08", long 84°54'15", in SW¼ sec.23, T.3 N., R.7 W., Jackson-Gadsden County line, Hydrologic Unit 03130011, 0.2 mi north of U.S. Highway I-10 bridge, 5.2 mi Southeast of Sneads and 100.2 mi above mouth.	17390	None	09-18-86	7750
Apalachicola River near Rock Bluff (02358664)	Apalachicola Bay	Lat 30°33'42", long 84°57'51", in NW¼ sec.20, T.2 N., R.7 W., Calhoun-Liberty county line, Hydrologic Unit 03130011, at Rock Bluff Landing, about 1 mi southwest of Torreya State Park, 3.4 mi northwest of Rock Bluff, and 92.2 mi above mouth.	17460	None	09-18-86	7600
Sweetwater Creek (02358673)	Apalachicola River	Lat 30°31'29", long 84°58'22" in SE¼ sec.31, T.2 N., R.7 W., Liberty County, Hydrologic Unit 03130011, at culvert on State Highway 270, 1.5 mi above mouth, 3.8 mi southeast of Rock Bluff, FL.	18.0	1951 1984	09-18-86	30
Apalachicola River near Sweetwater (02358684)	Apalachicola Bay	Lat 30°30'09", long 84°59'30", in NW¼ sec.12, T.1 N., R.8 W., Liberty-Calhoun County line, Hydrologic Unit 0313001, at southernmost of two pipelines, 1.2 mi below Graves Creek boat ramp, 1.2 mi southwest of Sweetwater and 87.6 mi above mouth.	17510	none	09-18-86	7040

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ELEVATION OF LAKES

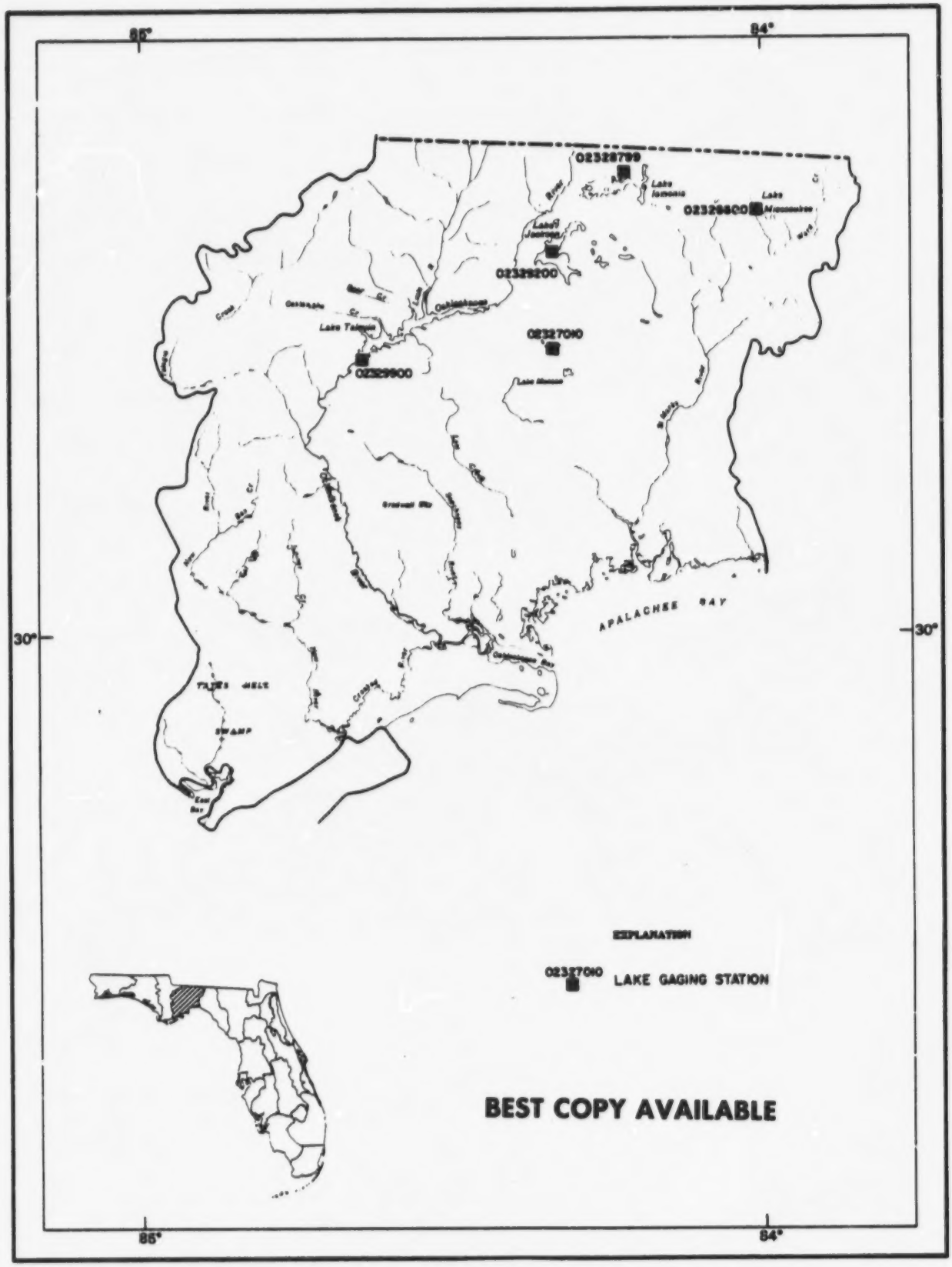

Figure 18. Location of lake gaging stations in the St. Marks, and Ochlockonee River basins.

02326600 LAKE MICCOSUKEE NEAR MICCOSUKEE, FL

LOCATION.--Lat 30°36'14", long 84°00'15", in NW¼ sec.2, T.2 N., R.3 E., Jefferson County, Hydrologic Unit 03120001, at fish camp on west shore of lake, 2.3 mi northeast of Miccosukee, Leon County.

SURFACE AREA.--6,312 acres (9.86 mi^2) at elevation 80 ft above NGVD.

DRAINAGE AREA.--240 mi^2.

PERIOD OF RECORD.--August 1965 to September 1972 (weekly); October 1972 to November 1983 (periodically); November 1983 to current year (once-daily).

GAGE.--Nonrecording gage. Datum of gage is 66.46 ft National Geodetic Vertical Datum of 1929. Gage readings have been reduced to elevations NGVD.

REMARKS.--Lake elevation is controlled by two structures. The outflow at the south end has fixed timber pile dam. An earthen dam, with a fixed concrete spillway and an underdrain consisting of a 7 ft culvert with lift gate, encircles a sinkhole at north end of lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 82.64 ft Apr. 7, 1973; minimum observed, 72.45 ft Jan. 12, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	79.64	80.20	80.00	80.22	79.98	80.46	---	79.26	78.86	78.52	78.84	79.18
10	79.56	80.02	79.92	80.26	80.78	80.26	79.66	79.16	78.78	78.46	78.76	79.16
15	79.50	79.88	80.42	80.28	81.76	80.38	79.58	79.10	78.76	78.38	78.86	79.10
20	79.46	79.86	80.61	80.24	81.46	80.26	79.48	79.04	78.72	78.40	78.92	79.06
25	79.44	79.92	80.46	80.18	80.86	80.10	79.42	79.06	78.64	78.66	79.06	79.02
EOM	80.06	79.86	80.28	80.06	80.72	79.96	79.34	78.98	78.58	78.62	79.16	78.96
MEAN	79.57	79.99	80.27	80.22	80.90	80.26	79.51	79.12	78.75	78.52	78.89	79.09
MAX	80.06	80.26	80.61	80.32	81.78	80.46	79.76	79.32	78.96	78.70	79.16	79.18
MIN	79.42	79.78	79.88	80.06	79.98	79.96	79.34	78.98	78.58	78.38	78.60	78.96

WTR YR 1986 MEAN 79.59 MAX 81.78 FEB 16 MIN 78.38 JUL 15 AND OTHERS

02327010 LAKE BRADFORD NEAR TALLAHASSEE, FL

LOCATION.--Lat 30°24'10", long 84°20'05", in NE¼ sec.16, T.1 S., R.1 W., Leon County, Hydrologic Unit 03120001, on east shore of lake at Florida State University dock, 4.0 mi southwest of State Capitol Building, Tallahassee. Auxillary staff gage 0.8 mi north.

SURFACE AREA.--182 acres, (0.28 mi^2) at elevation 31 ft NGVD.

DRAINAGE AREA.--20.6 mi^2.

PERIOD OF RECORD.--February to December 1954, (weekly, incomplete); January 1955 to June 1960, (bimonthly, incomplete); July 1960 to November 1961 (monthly); January 1962 to October 1979 (bimonthly); January 1980 to current year (fragmentary). Published since October 1960.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929. Apr. 8, 1955 to Mar. 2, 1956, nonrecording gage at site 600 ft northwest at datum 19.53 ft higher. Since January, 1980, an auxillary nonrecording gage 0.8 mi northeast at present datum.

REMARKS.--Lake is a chain of lakes connected by Bradford Brook. When the lake level is high it is connected with two smaller lakes to the northwest - Lake Hiawatha and Lake Minnehaha. Surface outflow to the northeast is through Bradford Brook into Grassy Lake, thence into Munson Slough, and is controlled by three culverts, elevation 31.7 ft. Loss to ground water through sinkholes on the east shore was reduced by plugging in March 1954.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 37.08 ft April 5, 1973; minimum observed, 21.00 ft June 26, 1955.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	32.92	---	---	33.09	---	---	32.16	31.48	---	31.98	---
10	31.99	---	33.33	33.34	33.43	33.17	32.78	32.02	31.37	31.69	---	---
15	---	---	34.34	33.37	---	---	32.69	31.86	31.60	---	---	---
20	---	---	34.15	---	---	---	---	31.84	---	---	31.50	---
25	---	---	---	---	---	33.18	---	---	---	---	31.37	---
EOM	32.08	---	33.20	---	33.51	33.06	32.31	---	31.63	---	---	31.30
MEAN	31.88	32.97	33.86	33.29	33.92	33.20	32.68	31.89	31.52	31.71	31.67	31.55
MAX	32.27	33.40	34.48	33.37	35.00	33.36	33.04	32.30	31.65	31.97	32.05	31.79
MIN	31.50	32.68	33.20	33.14	33.02	33.06	32.31	31.58	31.37	31.59	31.27	31.30

WTR YR 1986 MEAN 32.52 MAX 35.00 FEB 11 AND OTHERS MIN 31.27 AUG 26

02328799 LAKE IAMONIA NEAR BRADFORDVILLE, FL

LOCATION.--Lat 30°38'37", long 84°11'45", in SE¼ sec.23, T.3 N., R.1 E., Leon County, Hydrologic Unit 03120003, at south side of drawdown control structure, 2100 ft east of county public landing road, 1.2 mi southeast of Tall Timbers Research Center, and 5.7 mi north of Bradfordville.

SURFACE AREA.--5,680 acres (8.9 mi^2) at elevation, 98 ft NGVD.

DRAINAGE AREA.--101 mi^2.

PERIOD OF RECORD.--April 1919 to June 1937, 1957, 1963 (fragmentary); December 1974 to October 1975 (weekly); November 1975 to September 1977; February 1979 to September 1981 (weekly), October 1981 to September 1982 (monthly), November 1982 to May 1983 (fragmentary), November 1983 to current year. Records published since February 1979.

GAGE.--Water-stage recorder. Datum of gage is 82.00 ft above National Geodetic Vertical Datum of 1929. April 1919 to June 1937, at various sites and datums. December 1974 to October 1975, at site 0.9 mi northwest at datum 13.44 ft higher. November 1975 to September 1977, water-stage recorder at site 0.9 mi northwest at present datum. February 1979 to May 1983, nonrecording gage at site 0.9 mi northwest at same datum. November 1983 to May 1985, water-stage recorder at site 0.9 mi northwest at same datum. Gage heights have been reduced to elevations NGVD.

REMARKS.--Ochlockonee River overflows into lake at high stages.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 106.22 ft, Feb. 13, 1986, from floodmarks; minimum, 95.31 ft, Aug. 13, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 4, 1948, reached at stage of 106.97 ft from floodmarks from information by local resident. Lake dry, May 7, 1910, and in 1917 (month unknown), and Nov. 8, 1934, furnished by Dr. Komarek, Tall Timbers Research Center.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	96.97	97.47	101.01	101.15	100.86	101.10	99.70	98.85	98.29	---	97.68	---
10	96.85	97.73	100.80	101.21	103.03	100.69	99.52	98.73	98.18	---	97.69	97.50
15	96.77	97.71	101.56	101.90	105.22	100.52	99.39	98.62	98.14	---	---	97.48
20	96.72	97.73	102.27	101.76	102.78	100.34	99.24	98.62	98.28	97.73	---	97.38
25	96.63	98.69	101.74	101.33	102.00	100.12	99.12	98.50	98.16	97.73	---	97.29
EOM	97.04	101.01	101.27	101.00	101.62	99.88	98.99	98.37	---	97.72	---	97.19
MEAN	96.80	98.19	101.43	101.40	102.68	100.53	99.39	98.65	98.23	97.73	97.70	97.39
MAX	97.04	101.01	102.33	102.00	106.15	101.50	99.84	98.97	98.37	97.80	97.76	97.54
MIN	96.61	97.18	100.76	101.00	100.83	99.88	98.99	98.37	98.14	97.69	97.67	97.19

WTR YR 1986 MEAN 99.38 MAX 106.15 FEB 13 MIN 96.61 OCT 26

155

02329200 LAKE JACKSON NEAR TALLAHASSEE, FL

LOCATION.--Lat 30°31'43", long 84°21'30", in SW¼ sec.32, T.2 N., R.1 W., Leon County, Hydrologic Unit 03120003, on southwest side of lake, east of U.S. Highway 27, and 6.0 mi northwest of Tallahassee.

SURFACE AREA.--4,001 acres (6.25 mi^2), at elevation 87 ft NGVD.

DRAINAGE AREA.--43.2 mi^2.

PERIOD OF RECORD.--March 1950 to January 1953, March 1954 to August 1956, September 1956 to August 1958 (fragmentary), September 1958 to current year. Records of elevation prior to October 1960 are available in file of the Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake has no surface outlet. Some outflow from lake through sinkhole to ground water.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily elevation, 96.16 ft June 18, 1966 (from recorded range in stage); minimum observed, 75.68 ft Jan. 4, 1957.

EXTREMES FOR CURRENT YEAR.--Maximum daily elevations, 86.66 ft Mar. 20; minimum daily 82.33 ft, Oct. 26, 27.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.77	82.87	83.35	84.31	84.52	86.36	86.53	85.87	85.41	84.87	84.94	85.27
10	82.64	82.81	83.31	84.41	85.55	86.37	86.41	85.75	85.28	84.79	85.04	85.19
15	82.54	82.76	84.21	84.57	---	86.58	86.33	85.63	85.29	84.75	85.19	85.23
20	82.45	82.71	84.22	84.56	---	86.66	86.22	85.62	85.22	84.62	85.11	85.13
25	82.35	83.23	84.19	84.53	---	86.64	86.11	85.50	85.08	85.04	85.12	85.03
MEAN	82.55	82.94	83.86	84.47	---	86.50	86.31	85.65	85.25	84.85	85.09	85.15
MAX	82.87	83.26	84.23	84.57	---	86.66	86.59	85.98	85.49	85.04	85.19	85.28
MIN	82.33	82.71	83.31	84.26	---	86.26	86.00	85.35	84.95	84.62	84.93	84.92

02329900 LAKE TALQUIN NEAR BLOXHAM, FL

LOCATION.--Lat 30°23'15", long 84°38'45", in SW¼ sec. 16, T.1 S., R.4 W., Leon County, Hydrologic Unit 03120003, at left upstream end of Jackson Bluff Dam on Ochlockonee River, 1.0 mi northwest of Bloxham, and 3.5 mi downstream from Oklawaha Creek.

SURFACE AREA.--6,850 acres (10.7 mi^2), at elevation 60.0 ft NGVD, from data provided by Florida Power Corporation.

DRAINAGE AREA.--1,700 mi^2.

PERIOD OF RECORD.--January 1930 to September 1950 (monthend contents only, published only in WSP 1304); October 1951 to September 1960 (month-end elevations and contents); October 1960 to September 1982, March 1985 to current year (monthend elevations, contents and daily elevations).

REVISED RECORDS.--WSP 1905, WDR FL-76-4: Drainage area.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Florida Power Corp.).

REMARKS.--Reservoir is formed by concrete dam with riprapped earth embankments. Spillway is equipped with seven taintor gates, each 16 ft high by 25 ft wide. Storage began in June 1929; water in lake first reached minimum operating level January 1930. Usable capacity, 69,800 acre-ft between elevations, 60.0 ft, minimum operating level, and 68.5 ft, top of closed taintor gates. Contents given herein are above minimum operating level. Dead storage is unknown.

COOPERATION.--Records provided by City of Tallahassee, Electric Department.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily contents, 99,400 acre-ft Sept. 22, 1969, elevation, 71.16 ft (corrected); maximum instantaneous elevation, 71.60 ft Sept. 22, 1969; minimum daily elevation after January 1930, 48.70 ft Oct. 22,23, 1957 (earth embankment breached).

EXTREMES FOR CURRENT YEAR.--Maximum daily contents , 89,400 acre-ft Feb. 14, elevation, 70.31 ft; minimum daily contents, 62,400 acre-ft Nov. 27; elevation, 67.75 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	68.60	70,800	--
Oct. 31	68.70	71,800	+1,000
Nov. 30	68.10	65,800	-6,000
Dec. 31	68.75	72,300	+6,500
CAL YR 1985			*
Jan. 31	68.40	68,800	-3,500
Feb. 28	68.50	69,800	+1,000
Mar. 31	68.25	67,300	-2,500
Apr. 30	68.30	67,800	+ 500
May 31	68.32	68,000	+ 200
June 30	68.50	69,800	+1,800
July 31	68.90	73,800	+4,000
Aug. 31	68.92	74,000	+ 200
Sept. 30	68.28	67,600	-6,400
WTR YR 1986			-3,200

* NOTE.--Record for the 1985 calendar year was incomplete.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.70	68.50	68.35	68.65	69.09	68.33	68.48	68.34	68.32	68.44	68.89	68.64
10	68.25	68.60	68.65	68.62	68.69	68.28	68.40	68.52	68.44	68.11	68.65	68.55
15	68.30	68.60	68.70	68.61	69.82	68.12	68.38	68.67	68.58	68.24	68.52	68.50
20	68.35	68.60	68.60	68.66	68.50	68.90	68.36	68.84	68.77	68.38	68.60	68.50
25	68.30	68.35	68.65	68.64	68.53	68.26	68.37	68.66	68.42	68.66	68.45	68.42
EOM	68.70	68.10	68.75	68.40	68.50	68.25	68.30	68.32	68.50	68.90	68.92	68.28
MEAN	68.43	68.39	68.62	68.72	68.87	68.40	68.38	68.55	68.50	68.43	68.63	68.50
MAX	68.80	68.90	69.10	69.06	70.31	68.90	68.58	68.84	68.85	68.90	68.93	68.74
MIN	68.25	67.75	68.00	68.20	68.30	68.12	68.22	68.24	68.24	68.11	68.45	68.28

WTR YR 1986 MEAN 68.53 MAX 70.31 FEB 14 MIN 67.75 NOV 27

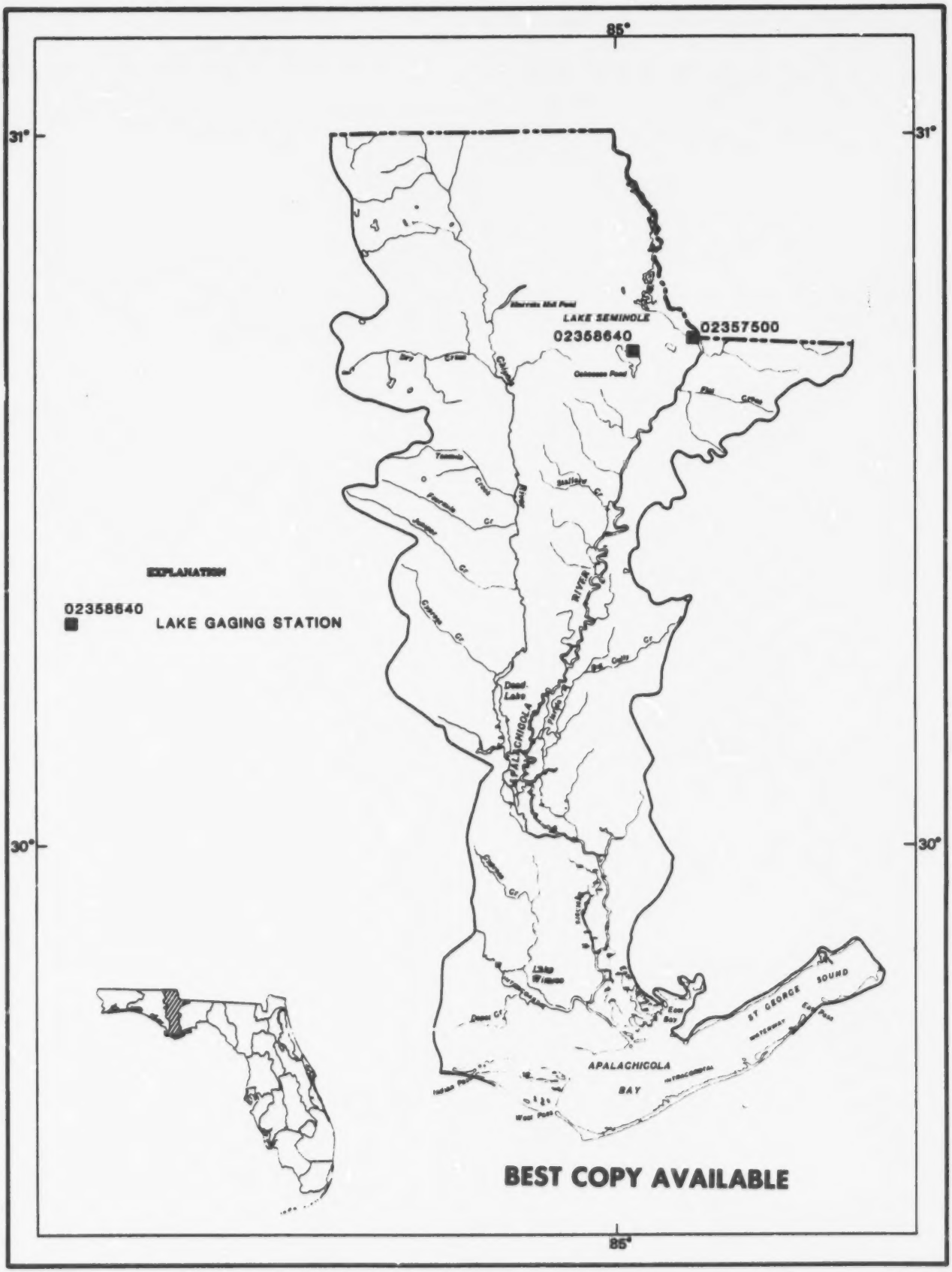

Figure 19. Location of lake gaging stations in the Apalachicola River basin.

02357500 LAKE SEMINOLE AT CHATTAHOOCHEE, FL

LOCATION.--Lat 30°42'29", long 84°51'56", in NE¼ sec. 31, T.4 N., R.6 W., Jackson County, Hydrologic Unit 03130004, near left bank in the control house of Jim Woodruff Dam on Chattahoochee River, 0.6 mi upstream from bridge on U.S. Highway 90, and 1.5 mi northwest of Chattahoochee.

SURFACE AREA.--37,500 acres (58.6 mi^2), at elevation 77.0 ft NGVD, from data provided by U.S. Army Corps of Engineers.

DRAINAGE AREA.--17,100 mi^2, approximately.

PERIOD OF RECORD.--July 1954 to September 1960 (monthend elevations and contents); October 1960 to current year (daily elevations and contents). Prior to October 1959, published as Jim Woodruff Reservoir at Chattahoochee.

REVISED RECORDS.--WSP 1554: 1955-57, WRD FL-83-4: 1983.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of U.S. Army Corps of Engineers). Prior to July 22, 1957, nonrecording gage at same site at datum 53.96 ft higher. Prior to 1981, on right upstream lock wall at same datum.

REMARKS.--Reservoir is formed by earthfill dam with concrete fixed-crest spillway, a center channel spillway with 16 vertical lift gates 40 ft long and 20.5 ft high, and a side channel navigation lock 82 ft wide. Total capacity at elevation 77.0 ft, normal pool, is 367,320 acre-ft, of which 36,170 acre-ft between elevation 77.0 ft and 76.0 ft are used for pondage. Gates closed on May 20, 1954; filling of lake accomplished in several stages between that date and Feb. 4, 1957, when the pool first reached normal operating level, elevation 77.0 ft. Figures given herein represent total contents. Lake is used for navigation and power.

COOPERATION.--Daily and monthend elevations provided by U.S. Army Corps of Engineers, Mobile District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 433,300 acre-ft Apr. 7, 8, 1960, elevation, 78.66 ft; minimum contents after Feb. 4, 1957, 272,100 ft Nov. 27, 1978, elevation, 74.18 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 399,400 acre-ft Jan. 4, elevation, 77.83 ft; minimum contents, 301,800 acre-ft July 21, elevation, 75.13 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	76.21	338,500	--
Oct. 31	77.00	367,300	+28,800
Nov. 30	77.42	383,300	+16,000
Dec. 31	77.08	370,300	-13,000
CAL YR 1985			+33,900
Jan. 31	76.96	365,800	- 4,500
Feb. 28	77.40	382,500	+16,700
Mar. 31	76.63	353,600	-28,900
Apr. 30	76.02	331,800	-21,800
May 31	76.42	346,000	+14,200
June 30	75.63	318,400	-27,600
July 31	76.00	331,200	+12,800
Aug. 31	75.90	327,700	- 3,500
Sept. 30	76.00	331,200	+ 3,500
WTR YR 1986			- 7,300

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	77.10	76.89	77.75	77.35	76.16	77.25	77.27	76.00	76.66	76.63	75.97	76.19
10	77.06	76.77	76.96	77.59	77.14	77.00	77.41	76.65	76.42	76.22	75.78	76.41
15	76.50	76.75	77.52	77.16	77.70	76.97	76.84	76.44	76.56	75.90	75.79	76.31
20	76.30	76.53	77.65	76.39	77.29	77.09	76.63	76.47	76.57	75.48	75.81	76.38
25	76.26	77.19	77.15	76.95	76.75	77.16	76.18	76.54	76.20	75.85	75.72	76.12
EOM	76.93	77.45	76.96	76.98	77.27	76.50	75.98	76.54	75.66	75.92	75.91	75.97
MEAN	76.58	76.94	77.36	77.04	77.03	77.13	76.71	76.42	76.39	75.95	75.85	76.21
MAX	77.13	77.45	77.76	77.77	77.70	77.66	77.41	76.76	76.79	76.63	76.08	76.47
MIN	76.02	76.27	76.85	76.37	75.96	76.36	75.74	76.00	75.66	75.27	75.63	75.83

WTR YR 1986 MEAN 76.63 MAX 77.77 JAN 4 MIN 75.27 JUL 21

02358640 OCHEESEE POND NEAR SNEADS, FL

LOCATION.--Lat 30°41'32", long 84°58'21", in NW¼ sec.6, T.3 N., R.7 W., Jackson County, Hydrologic Unit 03130004, near north shore of lake, 1.8 mi southeast of Grand Ridge, and 4.2 mi west of Sneads.

SURFACE AREA.--2,230 acres (3.5 mi^2).

DRAINAGE AREA.--24.2 mi^2.

PERIOD OF RECORD.--September and October 1979 (one observation each month); December 1979 to November 1980 (weekly); March 1981 to current year (fragmentary). Records of daily elevations, October 1948 to March 1950, provided by U.S. Army Corps of Engineers, are available in files of the Geological Survey.

GAGE.--Nonrecording gage. Datum of gage is 17.68 ft above National Geodetic Vertical Datum of 1929. Since December 31, 1982, auxiliary nonrecording gage at site 300 ft north at datum 2.02 ft lower. Prior to May 21, 1981, nonrecording gage at different site at datum 89.68 ft higher. October 1948 to March 1950, nonrecording gage established by U.S. Army Corps of Engineers, at site on south shore of lake at datum 86.21 ft higher.

REMARKS.--Outflow from the lake is through two ditches below SR 280 at south end of lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 114.7 ft Mar. 6, 1984, provided by local resident; minimum observed, 105.62 ft Oct. 13, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum elevation observed, 117.97 ft Oct. 22, 1948, provided by U.S. Army Corps of Engineers.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	TEMPERATURE (DEG C)	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	TEMPERATURE (DEG C)	ELEVATION ABOVE NGVD (FEET)
NOV				MAY			
18...	1155	24.0	106.47	22...	1600	23.5	110.37
FEB				JUL			
03...	1100	13.0	108.86	23...	1430	30.0	109.12
APR				SEP			
23...	0915	--	110.96	18...	1315	28.5	108.62

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Figure 20. Location of lake gaging stations in the Econfina Creek basin.

02359618 PORTER LAKE NEAR GREENHEAD, FL

LOCATION.--Lat 30°29'50", long 85°33'05", in SW¼ sec.9, T.1 N., R.13 W., Washington County, Hydrologic Unit 03140101, on west shore near southwest end of lake, 6.6 mi east of Greenhead.

SURFACE AREA.--929 acres (1.45 mi^2) at elevation 70 ft NGVD.

DRAINAGE AREA.--7.64 mi^2.

PERIOD OF RECORD.--January 1961 to September 1970 (weekly), incomplete; October 1970 to current year (periodically).

GAGE.--Nonrecording gage. Datum of gage is 52.27 ft above National Geodetic Vertical Datum of 1929. Gage readings have been reduced to elevations NGVD.

REMARKS.--Lake is in a closed basin of lakes and ponds, fed by White Oak Creek, in the western part of Econfina Creek basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum observed elevation, 75.37 ft Mar. 26, 1984; minimum observed, 53.22 ft Dec. 8, 1969.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			APR		
06...	1200	65.17	03...	1050	72.85
08...	1205	65.13	24...	1200	72.37
25...	1200	64.67	MAY		
NOV			13...	0745	71.73
24...	1200	67.05	JUN		
DEC			22...	1200	70.87
09...	1130	67.79	27...	1200	71.23
23...	1200	69.25	JUL		
JAN			22...	1630	69.85
26...	1200	70.65	24...	1200	69.97
FEB			AUG		
13...	1200	72.43	25...	1200	70.07
23...	1200	73.03	SEP		
MAR			10...	0915	70.33
06...	1200	73.07	23...	1200	70.05
22...	1200	73.07			

02359660 DEER POINT LAKE NEAR PANAMA CITY, FLA.

LOCATION.--Lat. 30°17'57", long 85°34'50", in SE¼ sec.19, T.2 S., R.13 W., Bay County, Hydrologic Unit 03140101, on east shore of lake, on private dock 0.3 mi north of public boat landing, 2.4 mi north of Deer Point Dam, and 10 mi northeast of Panama City.

SURFACE AREA.--4,698 acres, 7.34 mi^2, at elevation 4.3 ft NGVD.

DRAINAGE AREA.--435 mi^2, of which 43.9 mi^2 is noncontributing.

PERIOD OF RECORD.--November 1961 to September 1962 (fragmentary); October 1962 to October 1978 (once daily); November to December 1978 (weekly); January to June 1979 (once daily); July 1979 to January 1981 (weekly); February 1981 to current year (once daily).

REVISED RECORD.--WRD FL-78-4: 1962-77.

GAGE.--Nonrecording gage. Datum of gage is National Geodetic Vertical Datum of 1929 (Florida Department of Transportation bench mark). Prior to June 4, 1965 at site 0.3 mi south at datum then in use.

REMARKS.--Lake is formed by fixed concrete-capped sheet-pile dam with underpass tube and valve; crest of dam is at elevation 4.3 ft. Dam was completed on Nov. 17, 1961, and was filled to normal elevation of 4.6 ft Dec. 2, 1961. Minimum elevation affected by drawdown of lake level.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 7.67 ft July 31, 1975, from high-water mark; minimum elevation, 1.2 ft estimated, Jan. 6, 1981, 1981, minimum observed, 1.40 ft Mar. 3, 1986.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.93	4.92	4.88	5.15	1.88	1.50	4.84	4.89	4.88	4.84	4.90	5.06
10	4.86	4.82	4.86	5.14	4.90	2.91	4.82	4.91	4.87	4.86	4.91	4.87
15	4.87	4.74	5.50	5.06	4.34	5.11	4.89	4.83	4.81	4.89	4.85	4.89
20	4.81	4.72	4.93	4.27	3.15	4.98	4.85	4.93	4.86	4.88	4.78	4.92
25	4.80	5.12	4.83	3.35	2.31	4.90	4.88	4.78	4.91	5.01	3.90	4.78
EOM	5.15	---	4.83	2.92	---	4.89	---	4.88	---	4.99	4.89	---
MEAN	4.87	5.01	4.98	4.37	3.07	3.77	4.87	4.86	4.86	4.89	4.74	4.89
MAX	5.15	6.00	5.80	5.41	5.42	5.11	4.92	4.93	4.91	5.02	4.93	5.10
MIN	4.78	4.72	4.83	2.38	1.42	1.40	4.82	4.78	4.80	4.79	3.90	4.75

WTR YR 1986 TOTAL 1681.75 MEAN 4.61 MAX 6.00 MIN 1.40

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WELL DESCRIPTIONS AND GROUND-WATER DATA

Figure 21. Location of wells in Alachua County

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ALACHUA COUNTY

WELL NUMBER.--293620082362001. USGS Observation Well near Newberry, FL.

LOCATION.--Lat 29°36'20", long 82°36'20", in NW¼SW¼NW¼ sec.22, T.10 S., R.17 E., Hydrologic Unit 03110101, 3.0 mi south of Newberry and 6.5 mi north of Archer.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 8 in., depth 252 ft, cased to 136 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of recorder shelf, 4.00 ft above land-surface datum.

DATUM.--Land-surface datum is 72.27 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1958 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 54.63 ft NGVD, Oct. 7, 1965; lowest, 38.00 ft NGVD, Jan. 15, 1982.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
29...	0930	46.47	13...	1345	46.00
DEC			29...	1300	45.62
06...	1235	46.31	JUN		
23...	0930	46.00	23...	1115	45.10
JAN			JUL		
30...	1115	45.63	29...	1315	44.38
FEB			AUG		
19...	1220	45.92	28...	1150	44.57
MAR			SEP		
25...	1240	46.27	16...	1320	45.73
APR			24...	1140	45.87
29...	1300	46.27			

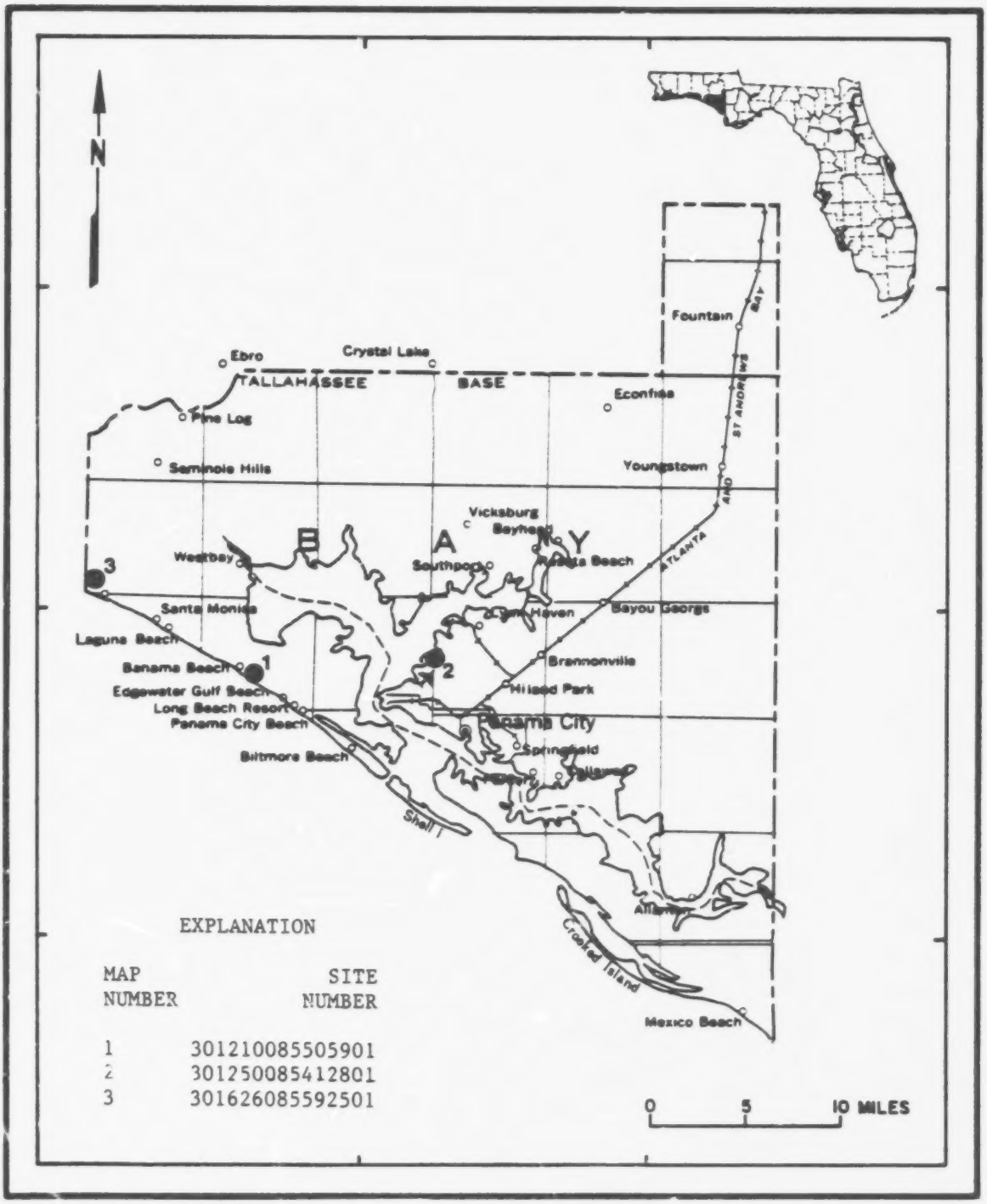

Figure 22. Location of wells in Bay County

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BAY COUNTY

WELL NUMBER.--301210085505901. West Panama City Beach Well at West Panama City Beach, FL.

LOCATION.--Lat 30°12'10", long 85°50'59", in SW¼NE¼NE¼ sec.28, T.3 S., R.16 W., Hydrologic Unit 03140101, about 100 ft west of State Highway 30J and 0.2 mi north of U.S. Highway 98 at Panama City Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 590 ft, cased to 306 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of extended casing, 5.34 ft above land-surface datum.

DATUM.--Land-surface datum is 28.52 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1962 to July 1965; January 1966 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.99 ft NGVD, May 14, 1973; lowest measured, -14.67 ft NGVD, Sept. 1, 1970.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
08...	1455	1.84	14...	0810	3.57
NOV			JUL		
15...	0920	2.68	23...	0700	1.06
FEB			SEP		
04...	1025	4.16	09...	0725	0.28
APR					
01...	1730	4.04			

WELL NUMBER.--301250085412801. Panama City Airport Authority Well, near Panama City, FL.

LOCATION.--Lat 30°12'50", long 85°41'28", in NW¼SW¼NW¼ sec.19, T.3 S., R.14 W., Hydrologic Unit 03140101, 200 ft north of Frankford Ave., 1.4 mi north of State Highway 390 and 3.6 mi northwest of Panama City.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in, depth 345 ft, cased to 326 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.50 ft above land-surface datum. Prior to September 1965 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 4.03 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1962 to September 1965; March 1966 to December 1968 (monthly); January 1969 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 4.84 ft NGVD, Mar. 6, 1969; lowest measured, -9.68 ft NGVD, July 23, 1986.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
08...	1428	-1.20	14...	0910	-5.11
NOV			JUL		
15...	1005	0.11	23...	0810	-9.68
FEB			SEP		
04...	1110	0.31	08...	1805	-4.51
APR					
02...	0730	-0.51			

BAY COUNTY

WELL NUMBER.--301628085592501. Avondale Mills Well near Panama City, FL.

LOCATION.--Lat 30°16'26", long 85°59'25", in NW¼NE¼SW¼ sec.31, T.2 S., R.17 W., Hydrologic Unit 03140101, at Camp Helen, 0.4 mi east of Walton - Bay county line and 6.1 mi northwest of Panama City Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 8 in., depth 482 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of airline hole, 1.95 ft above land-surface datum.

DATUM.--Land-surface datum is 22.13 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1961 to December 1963 (monthly); October 1968 to September 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 13.07 ft NGVD, Feb. 19, 1963; lowest measured, -7.51 ft NGVD, July 15, 1986.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			JUL		
29...	1115	-3.63	15...	1205	-7.51
MAY					
08...	1500	-0.74			

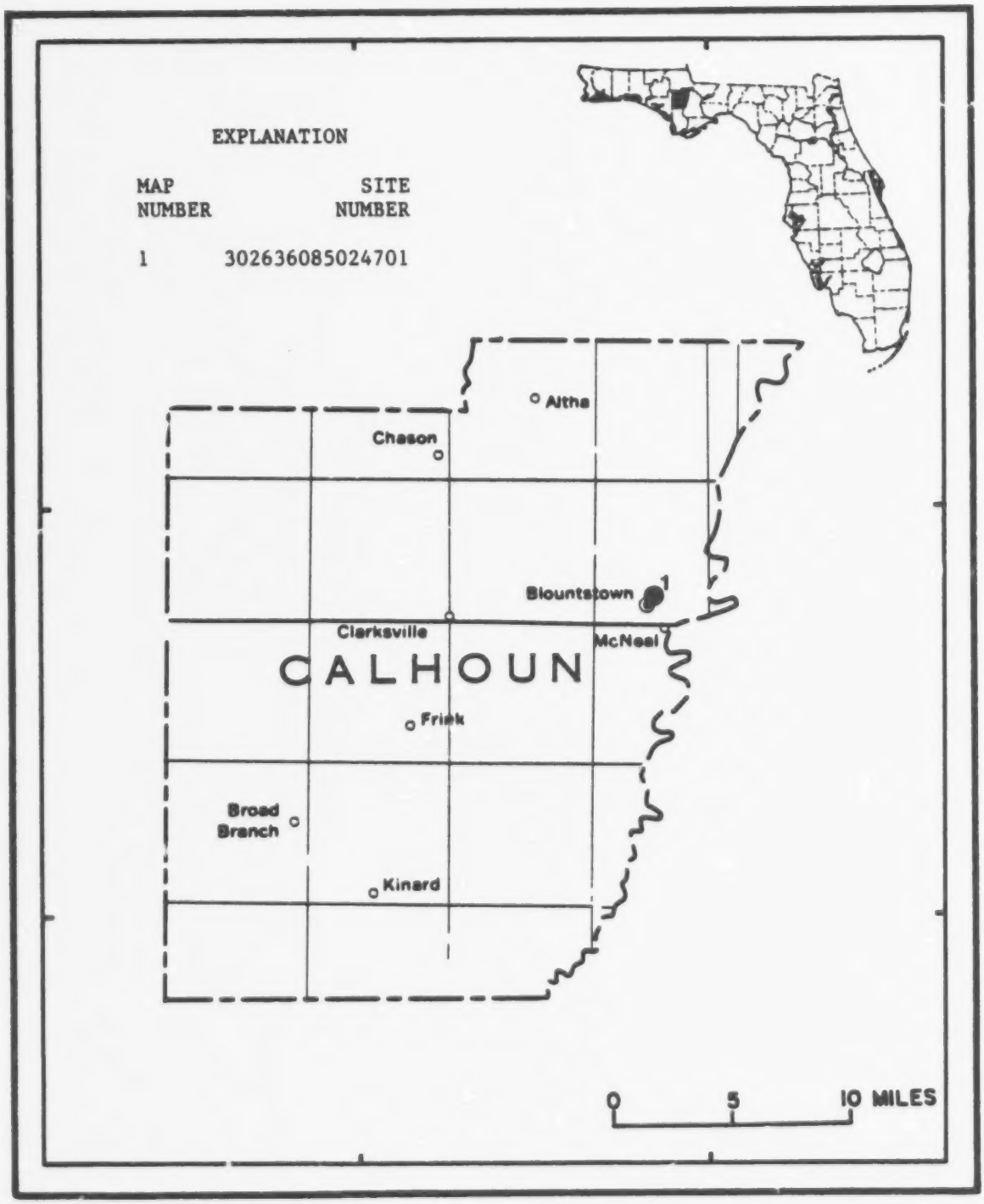

Figure 23. Location of wells in Calhoun County

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CALHOUN COUNTY

WELL NUMBER.--302636085024701. City of Blountstown Well at Blountstown, FL.

LOCATION.--Lat 30°26'36", long 85°02'47", in SE¼NW¼NW¼ sec.33, T.1 N., R.8 W., Hydrologic Unit 03130011, at City Hall Building in Blountstown.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 6 in., depth 212 ft, cased to 36 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in cap at land-surface datum.

DATUM.--Land-surface datum is 58.94 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June to November 1961 (monthly); January 1962 to July 1964 (bimonthly); January 1965 to June 1977 (semiannually); November 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 58.54 ft NGVD, Jan. 14, 1966; lowest measured, 44.86 ft NGVD, May 14, 1985.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
03...	0925	50.67	12...	1107	47.84
NOV			JUL		
14...	0850	51.06	21...	1240	48.77
FEB			SEP		
03...	0655	52.39	10...	1255	49.06
APR					
03...	0750	53.23			

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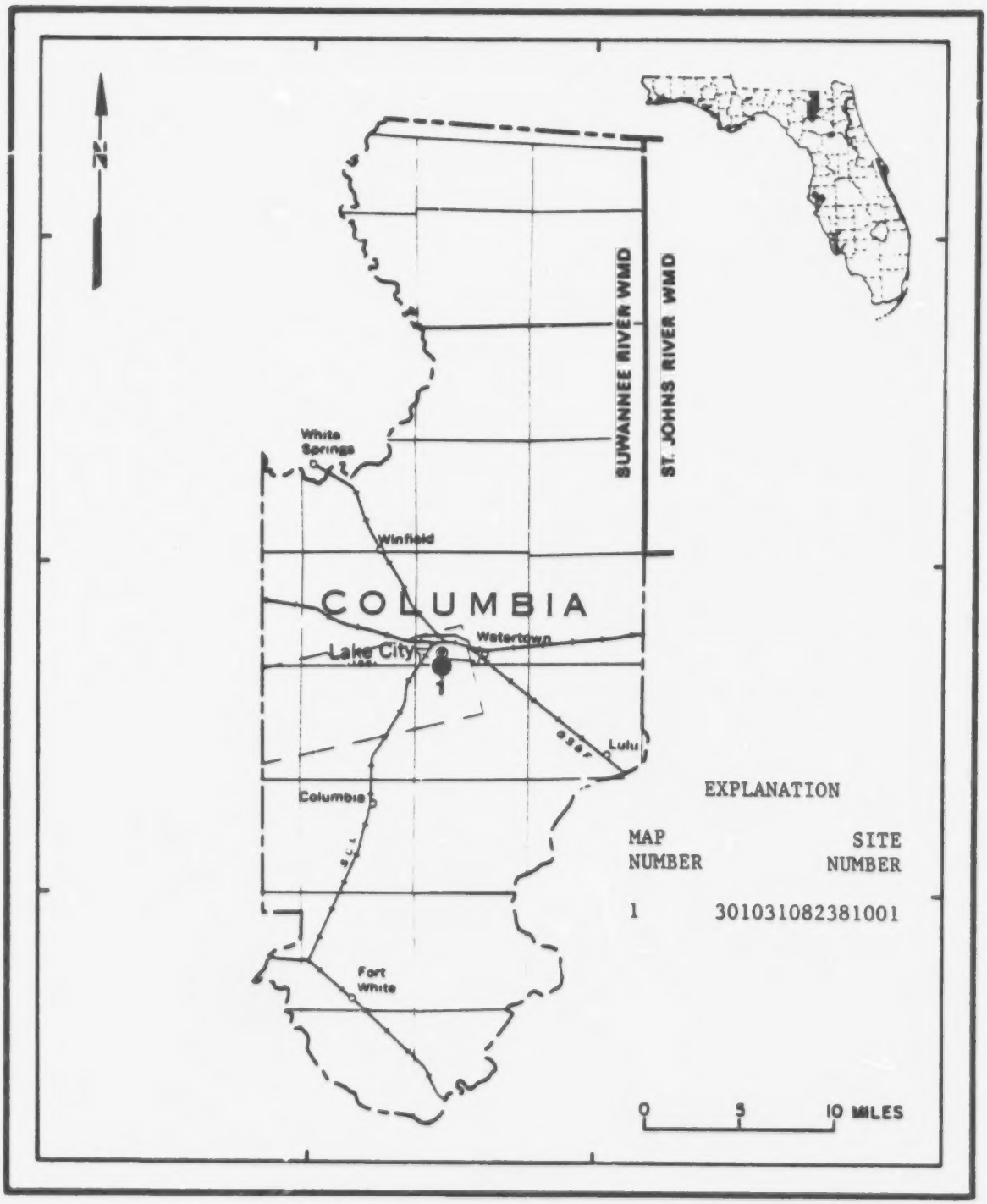

Figure 24. Location wells in Columbia County

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COLUMBIA COUNTY

WELL NUMBER.--301031082381001. Local Number Columbia 9. City of Lake City Well at Lake City, FL.

LOCATION.--Lat 30°10'31", long 82°38'10", in SE¼NE¼NW¼ sec.5, T.4 S., R.17 E., Hydrologic Unit 03110206, 0.1 mi east of U.S. Highway 441 and 1.0 mi south of intersection of U.S. Highway 441 and U.S. Highway 90 at Lake City.

AQUIFER --Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 12 in., depth 836 ft, cased to 680 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top edge shelter floor, 1.05 ft above land-surface datum.

DATUM.--Land-surface datum is 143.64 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1942 (annually); June 1948 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 64.11 ft NGVD, June 4, 1948; lowest, 46.14 ft NGVD, Jan. 5, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	49.54	49.84	49.94	50.20	50.90	51.89	53.08	53.05	52.49	51.60	50.77	50.29
10	49.55	49.75	49.79	50.30	51.19	52.13	53.36	53.01	52.23	51.41	50.64	50.03
15	49.58	49.78	49.81	50.22	51.21	52.50	53.34	52.85	52.17	51.29	50.70	49.94
20	49.57	49.85	49.90	50.50	51.43	52.64	53.35	52.93	52.07	51.28	50.62	49.81
25	49.66	49.86	50.13	50.59	51.55	52.59	53.24	52.73	51.88	51.07	50.47	49.77
EOM	50.11	49.98	50.07	50.53	51.76	52.96	53.16	52.64	51.78	51.02	50.28	49.65
TOTAL	1537.43	1496.63	1548.04	1560.02	1433.82	1623.46	1597.89	1640.17	1564.89	1590.54	1568.85	1499.12
MEAN	49.59	49.89	49.94	50.32	51.21	52.37	53.26	52.91	52.16	51.31	50.61	49.97
MAX	50.11	50.12	50.18	50.80	51.86	52.96	53.44	53.19	52.64	51.75	51.00	50.29
MIN	49.39	49.72	49.79	49.98	50.52	51.69	53.06	52.60	51.77	51.02	50.27	49.65

WTR YR 1986 TOTAL 18660.86 MEAN 51.13 MAX 53.44 APR 21 MIN 49.39 OCT 8

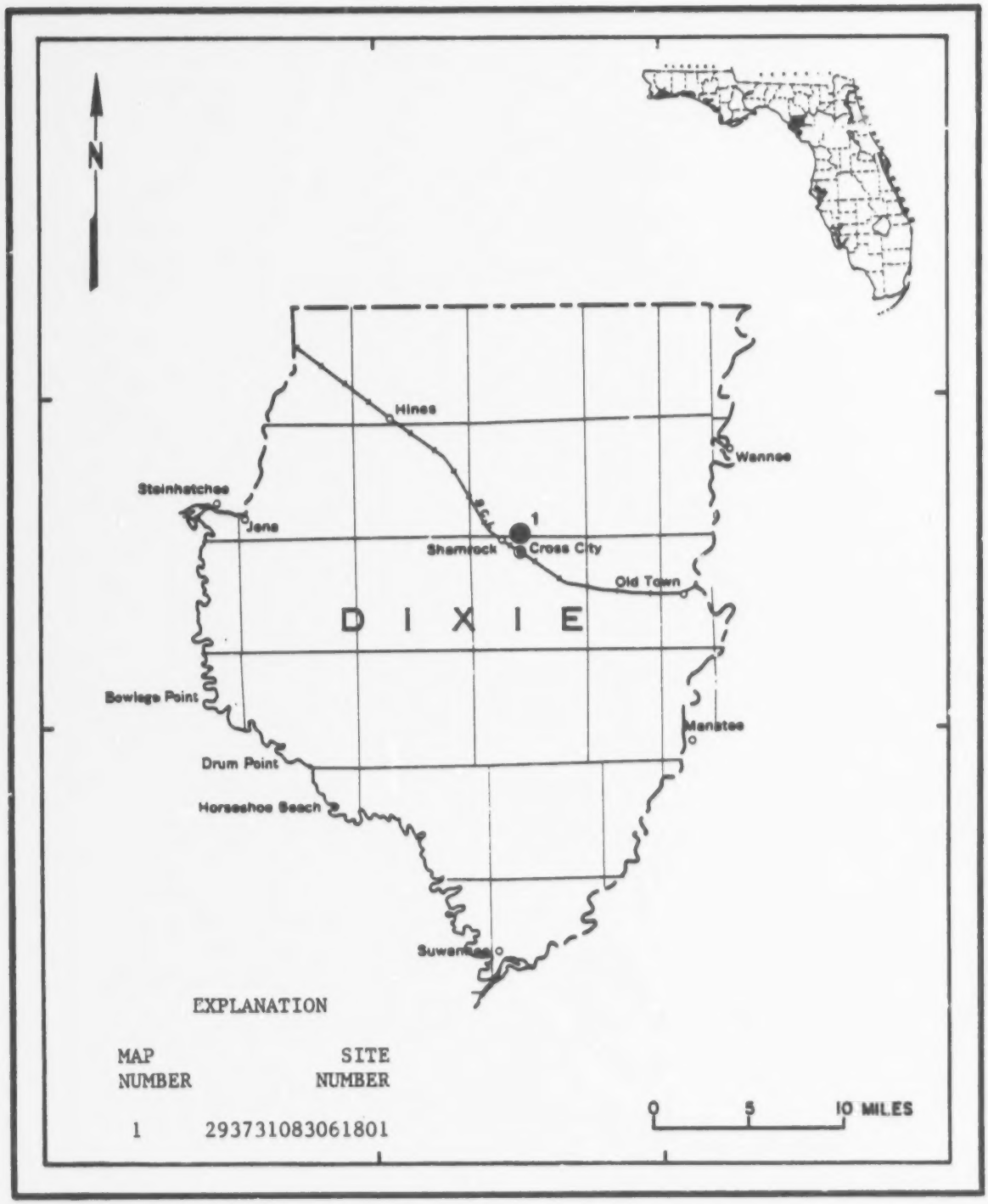

Figure 25. Location wells in Dixie County

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DIXIE COUNTY

WELL NUMBER.--293731083061801. Local Number Dixie 15. City of Cross City Well near Cross City, FL.

LOCATION.--Lat 29°37'31", long 83°06'18", in SW¼NE¼SE¼ sec.10, T.10 S., R.12 E., Hydrologic Unit 03110102, 0.1 mi north of U.S. Highway 19 and 1.0 mi east of Cross City.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth 215 ft, cased to 105 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top edge shelter floor, 3.75 ft above land-surface datum.

DATUM.--Land-surface datum is 40.17 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1957 to April 1963; April 1963 to July 1964 (bimonthly); January 1964 to July 1974 (semiannually), January 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 39.33 ft NGVD, Sept. 19, 1959; lowest, 30.00 ft NGVD, Aug. 18, 19, 1977.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
24...	1100	35.72	28...	0815	33.82
DEC			JUN		
05...	1140	35.52	26...	1000	35.06
27...	1010	35.08	JUL		
JAN			28...	1235	35.03
28...	1050	35.78	AUG		
FEB			22...	1050	36.64
20...	1040	36.11	SEP		
MAR			25...	0950	36.00
24...	1150	36.13			
APR					
23...	1045	34.88			

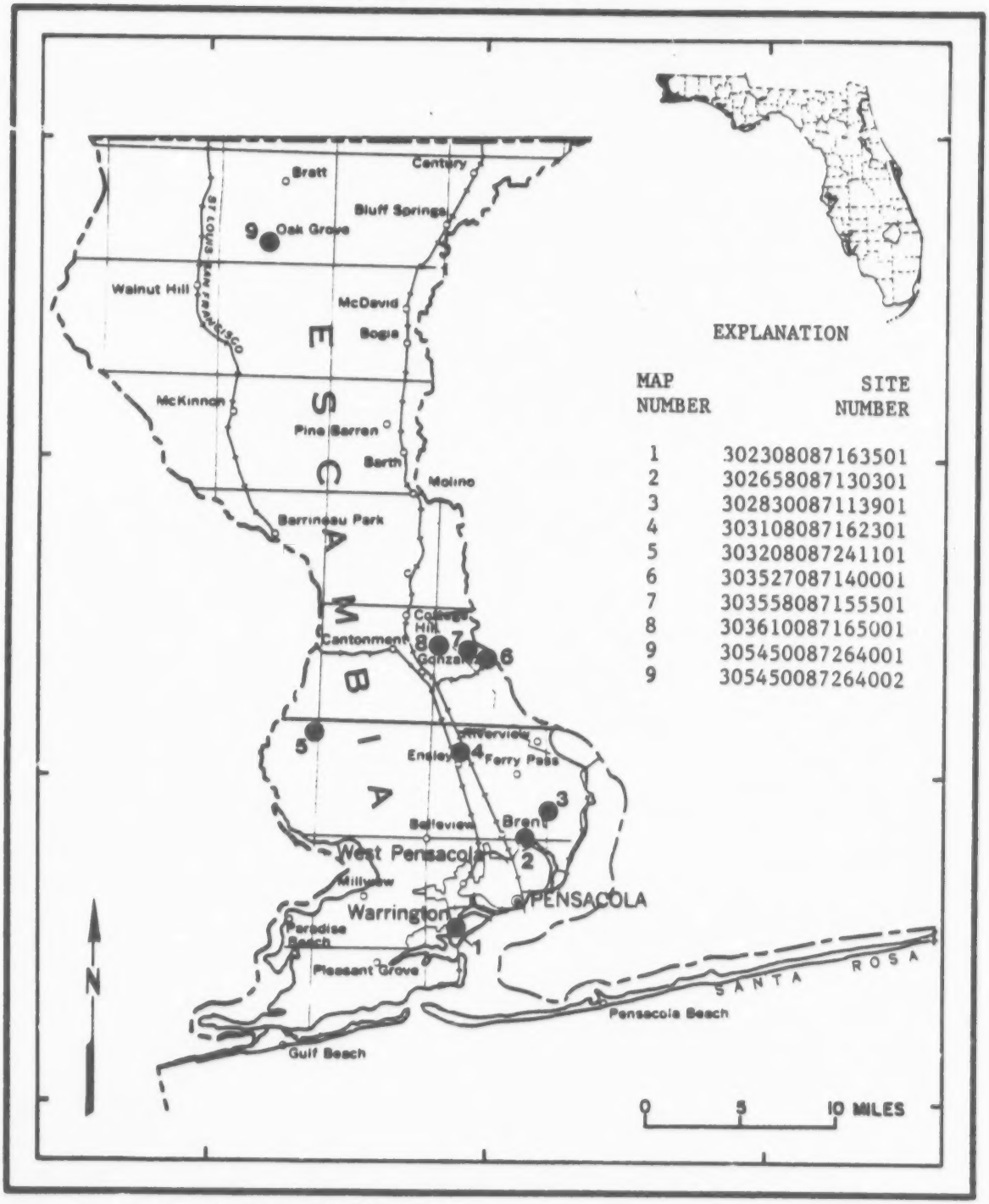

Figure 26. Location of wells in Escambia County

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ESCAMBIA COUNTY

WELL NUMBER.--302308087163501. Local number 39. Irving B. Hanna Well at Warrington, FL.

LOCATION.--Lat 30°23'08", long 87°16'35", in land grant 51, T.2 S., R.30 W., Hydrologic Unit 03140105, 45 ft north of East Winthrop Avenue and 140 ft east of First Street at Warrington.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in., depth 244 ft, cased to 92 ft, screened 92 to 99 ft, 156 to 170 ft, and 232 to 244 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 1.0 ft above land-surface datum.

DATUM.--Land-surface datum is 9.91 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1940 to October 1962 (weekly); October 1962 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.05 ft NGVD, Aug. 13, 1940; lowest measured, -8.35 ft NGVD, Aug. 5, 1968.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			APR		
14...	1155	0.40	21...	1215	1.87
NOV			MAY		
18...	1505	1.69	12...	0955	-0.48
DEC			JUN		
08...	1400	2.18	11...	1015	-1.37
JAN			JUL		
13...	1345	1.92	14...	0950	-2.25
FEB			AUG		
11...	1205	3.28	11...	0930	-1.52
MAR			SEP		
24...	1220	2.53	07...	1140	0.65

ESCAMBIA COUNTY

WELL NUMBER.--302658087130301. Local number 026-713-5. USGS Observation Well at Pensacola, FL.

LOCATION.--Lat 30°26'58", long 87°13'03", in land grant 4, T.2 S., R.30 W., Hydrologic Unit 03140105, 33 ft west of State Highway 291 (Alcaniz Street) and 0.3 mi south of State Highway 289 (Fairfield Drive) at Pensacola.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 149 ft, cased to 144 ft, screened from 144 to 149 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plug, 2.71 ft above land-surface datum.

DATUM.--Land-surface datum is 89.41 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1959 to July 1962; October 1962 to current year (weekly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.69 ft NGVD, Oct. 29, 1979; lowest measured, 19.33 ft NGVD, Feb. 19, 1973.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	27.10
2	---	---	26.91	---	---	---	---	---	27.73	---	---	---
3	---	---	---	---	26.86	27.68	---	---	---	---	---	---
4	---	26.06	---	---	---	---	---	---	---	---	27.42	---
5	---	---	---	---	---	---	28.13	27.84	---	---	---	---
6	---	---	---	26.69	---	---	---	---	---	---	---	---
7	25.44	---	---	---	---	---	---	---	---	27.35	---	27.27
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	26.68	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	27.67	---	---	---	---	---	---
11	---	26.23	---	---	27.23	---	---	---	27.73	---	27.52	---
12	---	---	---	---	---	---	---	27.88	---	---	---	---
13	---	---	---	26.93	---	---	---	---	---	---	---	---
14	25.25	---	---	---	---	---	28.05	---	---	27.46	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	26.78	---	---	26.23	---	---	27.63	---	---	26.94
17	---	---	---	---	27.37	---	---	---	---	---	---	---
18	---	26.35	---	---	---	---	---	---	---	---	27.33	---
19	---	---	---	---	---	---	---	28.27	---	---	---	---
20	---	---	---	26.85	---	---	---	---	---	---	---	---
21	25.35	---	---	---	---	---	26.32	---	---	27.82	---	---
22	---	---	---	---	---	---	---	---	---	---	---	26.92
23	---	---	26.83	---	---	---	---	---	28.21	---	---	---
24	---	---	---	---	27.58	28.23	---	---	---	---	---	---
25	---	26.50	---	---	---	---	---	---	---	---	27.30	---
26	---	---	---	---	---	---	---	28.29	---	---	---	---
27	---	---	---	26.76	---	---	---	---	---	---	---	---
28	25.47	---	---	---	---	---	27.90	---	---	27.52	---	---
29	---	---	---	---	---	---	---	---	---	---	---	27.12
30	---	---	26.81	---	---	---	---	---	27.73	---	---	---
31	---	---	---	---	---	28.28	---	---	---	---	---	---

ESCAMBIA COUNTY

WELL NUMBER.--302830087113901. Pensacola Airport Well at Pensacola, FL.

LOCATION.--Lat 30°28'30", long 87°11'39", in NW¼NE¼SW¼ sec.*, T.1 S., R.29 W., Hydrologic Unit 03140105, 160 ft southwest of Pensacola Airport terminal building at Pensacola.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, 120 NFSG.

WELL CHRACTERISTICS.--Drilled, unused, irrigation well, diameter 10 in., depth 210 ft, cased 163 ft, screened from 163 to 210 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 110 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS --*Land is not sectionized in this area.

PERIOD OF RECORD.--July 1976 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 33.01 ft NGVD, May 25, 1980; lowest, 15.70 ft NGVD, Jan. 17, 1982.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
04...	0735	17.00	03...	1400	22.10
DEC			JUN		
12...	1415	19.80	12...	1700	21.47
FEB			AUG		
06...	1630	20.34	07...	1430	21.48

ESCAMBIA COUNTY

WELL NUMBER.--303108087162301. Local number 46. USGS Observation Well at Ensley, FL.

LOCATION.--Lat 30°31'08", long 87°16'23", in SE¼SE¼SW¼ sec.11, T.1 S., R.30 W., Hydrologic Unit 03140107, 24 ft west of Pensacola Boulevard, (U.S. Highway 29), 175 ft north of Detroit Boulevard and 0.4 mi west of State Highway 95A, (Old Palafox Highway), in Ensley.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in, depth 239 ft, cased to 229 ft, screened from 229 to 239 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of flange cover, 1.10 ft above land-surface datum.

DATUM.--Land-surface datum is 131.52 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1939 to June 1940 (weekly); June 1940 to May 1955; January 1955 to current year (weekly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 75.07 ft NGVD, Sept. 23, 1948; lowest measured, 48.27 ft NGVD, Nov. 27, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	50.66	---	---	---	---	---	---	---	---	50.34
3	---	---	---	---	51.43	51.73	---	---	50.33	---	---	---
4	---	50.42	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	51.44	50.14	---	---	49.43	---
6	---	---	---	51.08	---	---	---	---	---	---	---	---
7	50.33	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	49.70	---	50.65
9	---	---	50.79	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	50.78	---	---	---	---	---	---
11	---	50.32	---	---	51.61	---	---	---	50.33	---	49.39	---
12	---	---	---	---	---	---	---	50.15	---	---	---	---
13	---	---	---	51.17	---	---	---	---	---	---	---	---
14	50.43	---	---	---	---	---	51.50	---	---	49.47	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	50.74	---	---	49.74	---	---	50.13	---	---	50.67
17	---	---	---	---	51.82	---	---	---	---	---	---	---
18	---	50.54	---	---	---	---	---	---	---	---	49.60	---
19	---	---	---	---	---	---	---	50.90	---	---	---	---
20	---	---	---	51.27	---	---	---	---	---	---	---	---
21	50.46	---	---	---	---	---	51.13	---	---	50.30	---	---
22	---	---	---	---	---	---	---	---	---	---	---	50.17
23	---	---	51.18	---	---	---	---	---	51.24	---	---	---
24	---	---	---	---	51.79	51.60	---	---	---	---	---	---
25	---	50.73	---	---	---	---	---	---	---	---	49.56	---
26	---	---	---	---	---	---	---	50.95	---	---	---	---
27	---	---	---	51.39	---	---	---	---	---	---	---	---
28	50.85	---	---	---	---	---	50.43	---	---	50.05	---	---
29	---	---	---	---	---	---	---	---	---	---	---	49.63
30	---	---	49.87	---	---	---	---	---	50.17	---	---	---
31	---	---	---	---	---	50.46	---	---	---	---	---	---

ESCAMBIA COUNTY

WELL NUMBER.--303208087241101. Local number 032-724-1. USGS Observation Well near Ensley, FL.

LOCATION.--Lat 30°32'08", long 87°24'11", in NW¼NW¼NE¼ sec.12, T.1 S., R.32 W., Hydrologic Unit 03140106, 0.3 mi east of intersection of U.S. Highway 90 and U.S. Highway 90 Alternate, 2.8 mi east of Perdido River, and 8 mi west of Ensley.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 170 ft, cased to 165 ft, screened from 165 to 170 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plug, 2.9 ft above land-surface datum.

DATUM.--Land-surface datum is 123.43 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1958 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 34.83 ft NGVD, July 8, 1959; lowest measured 28.30 ft NGVD, Dec. 7, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			APR		
14...	0925	29.75	21...	0930	30.90
NOV			MAY		
18...	1220	30.16	11...	1600	30.47
DEC			JUN		
08...	1055	30.32	10...	0850	30.30
JAN			JUL		
13...	1100	30.69	07...	0945	30.11
FEB			AUG		
10...	0930	30.97	04...	1230	30.04
MAR			SEP		
24...	0910	30.89	01...	1055	30.04

WELL NUMBER.--303527087140001. Local number 83. Monsanto Company Well near Cantonment, FL.

LOCATION.--Lat 30°35'27", long 87°14'00", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, on south bank of Escambia River at Monsanto Plant, 3.5 mi northeast of U.S. Highway 29, and 4.9 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, unused, artesian test well, diameter 4 in., depth 293 ft, cased to 230 ft, screened from 230 to 240 ft and 282 to 292 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 37.5 ft National Geodetic Vertical Datum of 1929 (levels by Monsanto Company).

PERIOD OF RECORD.--July 1954 to March 1985; March 1985 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.80 ft NGVD, Mar. 29, 1983; lowest measured, -11.45 ft NGVD, Jan. 17, 1973.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
24...	1635	3.11	15...	1720	4.61
JAN			JUL		
07...	0815	3.40	16...	1410	4.00
MAR			SEP		
07...	0910	3.29	18...	1550	4.13

ESCAMBIA COUNTY

WELL NUMBER.--303558087155501. Local Number 73. Monsanto Plant Well near Cantonment, FL.

LOCATION.--Lat 30°35'58", long 87°15'55", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, on south bank of Escambia River at Monsanto Plant, 3.1 mi northeast of U.S. Highway 29, and 4.4 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 to 2.5 in, depth 306 ft, cased to 198 ft, screened from 198 to 208 ft, 294 to 304 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 51.89 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1951 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 15.49 ft NGVD, Nov. 10, 1951; lowest, -13.51 ft NGVD, July 12, 1974.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 24...	1845	3.30	MAY 15...	1700	6.39
JAN 07...	0835	4.10	JUL 16...	1440	5.99
MAR 06...	1110	4.44	SEP 18...	1615	4.69

WELL NUMBER.--303610087165001. Local Number 74. Monsanto Company well near Cantonment, FL.

LOCATION.--Lat 30°36'10", long 87°16'50", in land grant 30, T.1 N., R.30 W., Hydrologic Unit 03140305, 1.3 mi north of paved road to Monsanto Plant, 1.8 mi east of U.S. Highway 29, and 3.4 mi southeast of Cantonment.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 to 2¼ in., depth 352 ft, cased to 260 ft, screened from 260 to 270 ft and 340 to 350 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 97.39 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1951 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 23.42 ft NGVD, Nov. 10, 1951; lowest, -2.61 ft NGVD, Jan. 22, 1969.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 24...	1615	10.81	MAY 15...	1035	11.34
JAN 06...	1415	11.05	JUL 16...	1345	10.81
MAR 07...	0850	10.74	SEP 18...	1530	10.33

ESCAMBIA COUNTY

WELL NUMBER.--305450087264001. Local Number 054-726-1. U.S. Geological Survey Observation Well at Oak Grove, FL.

LOCATION.--Lat 30°54'50", long 87°26'40", in NE¼NW¼NE¼ sec.33, T.5 N., R.32 W., Hydrologic Unit 03140305, 36 ft west of State Highway 99, 700 ft south of intersection of State Highways 99 and 164 at Oak Grove.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 206 ft, cased to 201 ft, screened from 201 to 206 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 3.25 ft above land-surface datum. Prior to October 25, 1982 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 259.27 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1959 to October 1982; November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 176.54 ft NGVD, July 15, 1980; lowest measured, 166.00 ft NGVD, Mar. 5, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
02...	1030	170.14	01...	1625	171.99
DEC			JUN		
11...	1420	170.82	12...	0950	171.77
FEB			AUG		
04...	1405	171.65	06...	1215	171.20

WELL NUMBER.--305450087264002. Local Number 054-726-2. U.S. Geological Survey Observation Well at Oak Grove, FL.

LOCATION.--Lat 30°54'50", long 87°26'40", in NE¼NW¼NE¼ sec.33, T.5 N., R.32 W., Hydrologic Unit 03140305, 36 ft west of State Highway 99, 700 ft south of intersection of State Highways 99 and 164 at Oak Grove.

AQUIFER.--Nonartesian sand aquifer of the Tertiary System, Geologic Unit 120 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 4 in., depth 107 ft, cased to 102 ft, screened from 102 to 107 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of nipple, 3.25 ft above land-surface datum.

DATUM.--Land-surface datum is 259.21 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1959 to November 1962 (monthly); January 1963 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 194.71 ft NGVD, July 15, 1980; lowest measured, 179.64 ft NGVD, Mar. 5, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
02...	1035	185.17	01...	1630	187.30
DEC			JUN		
11...	1425	186.26	12...	0955	187.28
FEB			AUG		
05...	1400	187.39	06...	1220	186.57

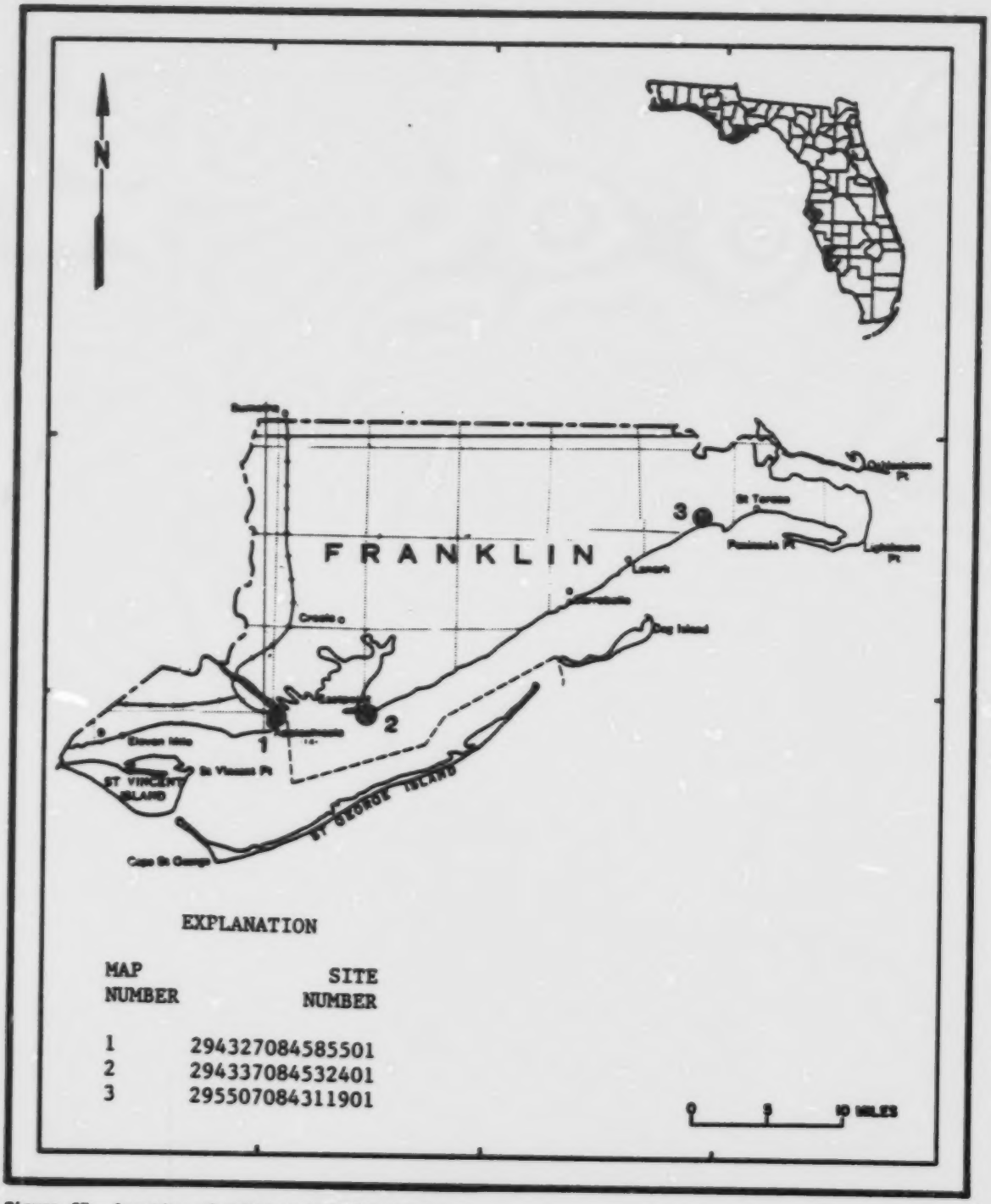

Figure 27. Location of wells in Franklin County

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FRANKLIN COUNTY

WELL NUMBER.--294327084585501. Local number 31. City of Apalachicola Well at Apalachicola, FL.

LOCATION.--Lat 29°43'27", long 84°58'55", in NW¼NE¼SW¼ sec.6, T.9 S., R.7 W., Hydrologic Unit 03130011, south of west approach to Gorrie Bridge at Apalachicola.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in., depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in. iron pipe, 1.30 ft above land-surface datum. Prior to July 1978, top of vitrified clay pipe, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 5.80 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: September 1949 to current year (bimonthly). (Well temporarily discontinued in May 1986 due to bridge construction.)
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semi-annually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.75 ft NGVD, Mar. 20 and May 1, 1950; lowest measured, 7.02 ft NGVD, July 5, 1966, February 28, 1985.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT 08...	1600	8.05	3200	23.5	770
APR 09...	1245	7.65	--	22.5	900

WELL NUMBER.--294337084532401. McCullogh Properties, Inc. well at Eastpoint, FL.

LOCATION.--Lat 29°43'37", long 84°53'24", in NE¼NE¼NE¼ sec.1, T.9 S., R.7 W. Hydrologic Unit 03130013, on south side of State Highway 65 near approach to St. George Island Bridge, .75 mi southwest of Eastpoint.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in, depth 221 ft, cased to 163 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of reducer, 1.70 ft above land-surface datum.

DATUM.--Land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--May 1981 to current year (semiannually).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.07 ft NGVD, May 21, 1986; lowest measured, 7.91 ft NGVD, July 18, 1986.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
MAY 21...	1705	9.07	450	19.5	8.6
JUL 18...	1755	7.91	416	25.5	10

FRANKLIN COUNTY

WELL NUMBER.--295507084311901. St. James. St. Joe Paper Company Well near Lanark, FL.

LOCATION.--Lat 29°55'07", long 84°31'19", in NW¼SW¼NE¼ sec.34, T.6 S., R.3 W., Hydrologic Unit 03130013, 500 ft northwest of intersection of U.S. Highway 98 and State Highway 377, 10 miles northeast of Carrabelle.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 10 in, depth 174 ft, cased to 80 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of shelter floor, 1.0 ft above land-surface datum. Prior to September 1980 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 32.09 ft National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1977 elevation of land-surface datum was considered to be 30 ft, from topographic map.

PERIOD OF RECORD.--September 1976 to September 1980. October 1980 to current year (bimonthly). The figures of water levels as elevation in feet, National Geodetic Vertical Datum prior to Oct. 1977 are in error. Revised records are in files of the U.S. Geological Survey. See DATUM.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 10.88 ft NGVD, Apr. 25, 1979; lowest, 8.37 ft NGVD, Dec. 10, 1977.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
08...	1650	10.27	21...	1435	10.13
DEC			JUL		
04...	1730	9.98	18...	2030	9.19
FEB			SEP		
19...	1610	10.45	15...	1425	10.40
APR					
09...	1630	9.99			

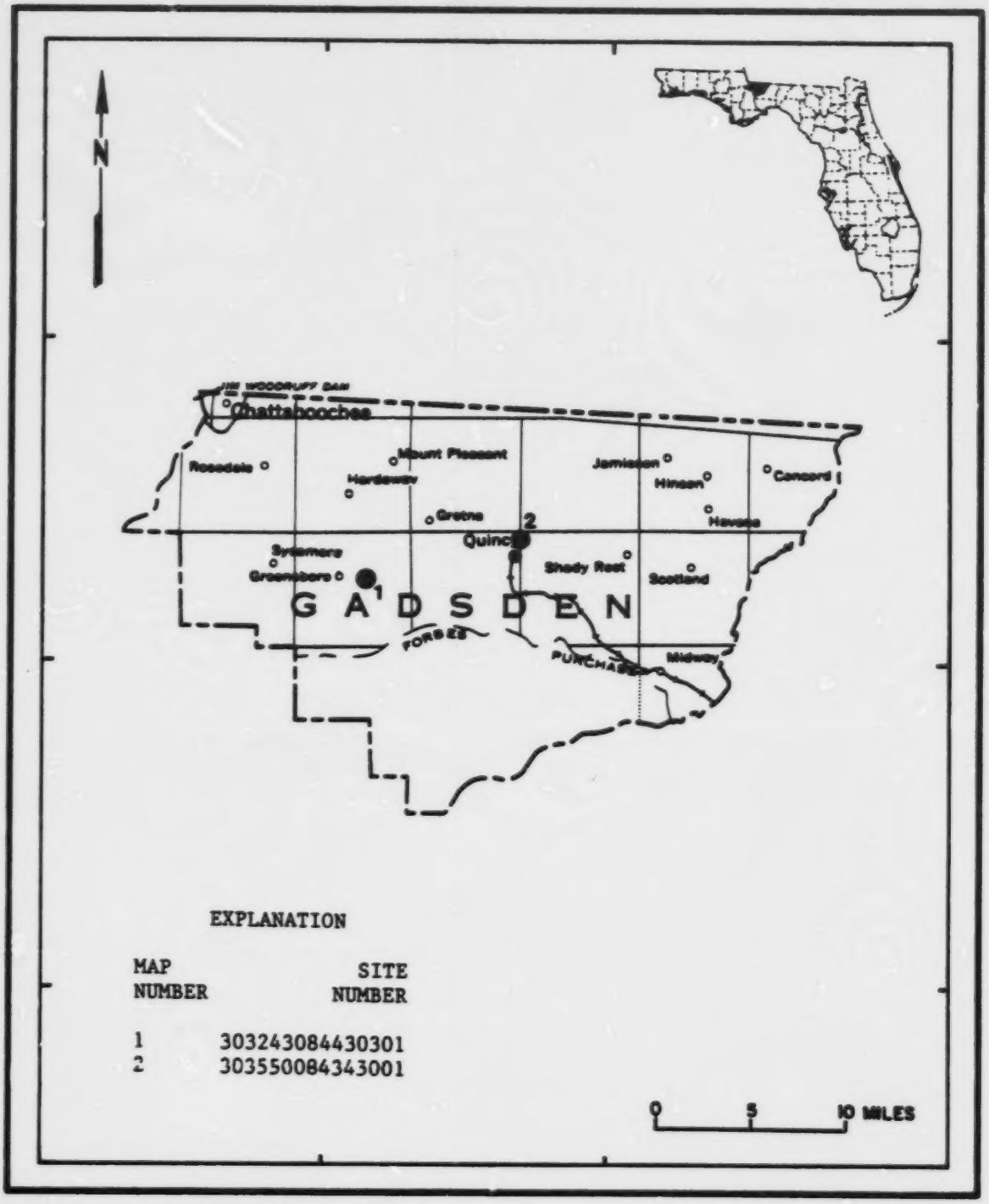

Figure 28. Location of wells in Gadsden County

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GADSDEN COUNTY

WELL NUMBER.--303243084430301. Franklin Fletcher Well near Greensboro, Fl.

LOCATION.--Lat 30°32'43", long 84°43'03", in SW¼NE¼NE¼ sec.27, T.2 N., R.5 W., Hydrologic Unit 03120003, 0.2 mi south of State Highway 274 and 1.9 mi southeast of Greensboro.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 8 in, depth 803 ft, cased to 530 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 8 in casing, 0.4 ft above land-surface datum.

DATUM.--Land-surface datum is 250.41 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1974 to September 1977; October 1977 to current year (bi monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 76.57 ft NGVD, May 23, 1976; lowest, 71.31 ft NGVD, Sept. 23, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION APOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
18...	1655	72.84	22...	1550	73.54
FEB			JUL		
27...	1135	74.14	23...	1640	72.83
APR			SEP		
11...	1430	74.48	10...	1455	73.06

WELL NUMBER.--303550084345001. City of Quincy Well No. 3 at Quincy, FL.

LOCATION.--Lat 30°35'50", long 84°35'50", in SE¼NW¼SW¼ sec.6, T.2 N., R.3 W., Hydrologic Unit 0312003, at water plant, 0.8 mi north of intersection of U.S. Highway 90 and State Highway 267 at Quincy.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 8 in to 6 in, depth 701 ft, cased to 430 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 6 in tee, 2.00 ft above land-surface datum. Prior to Oct. 1980 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 151.46 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to July 1964 (bimonthly); January 1965 to April 1974 (semiannually); January 1975 to September 1977 (bimonthly), October 1977 to September 1980; October 1980 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 68.11 ft NGVD, May 7, 1968; lowest, 46.95 ft NGVD, Sept. 21, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
18...	0950	59.45	22...	2040	62.35
FEB			JUL		
04...	1815	60.92	24...	1410	60.81
APR			SEP		
11...	1130	62.60	08...	1410	61.37

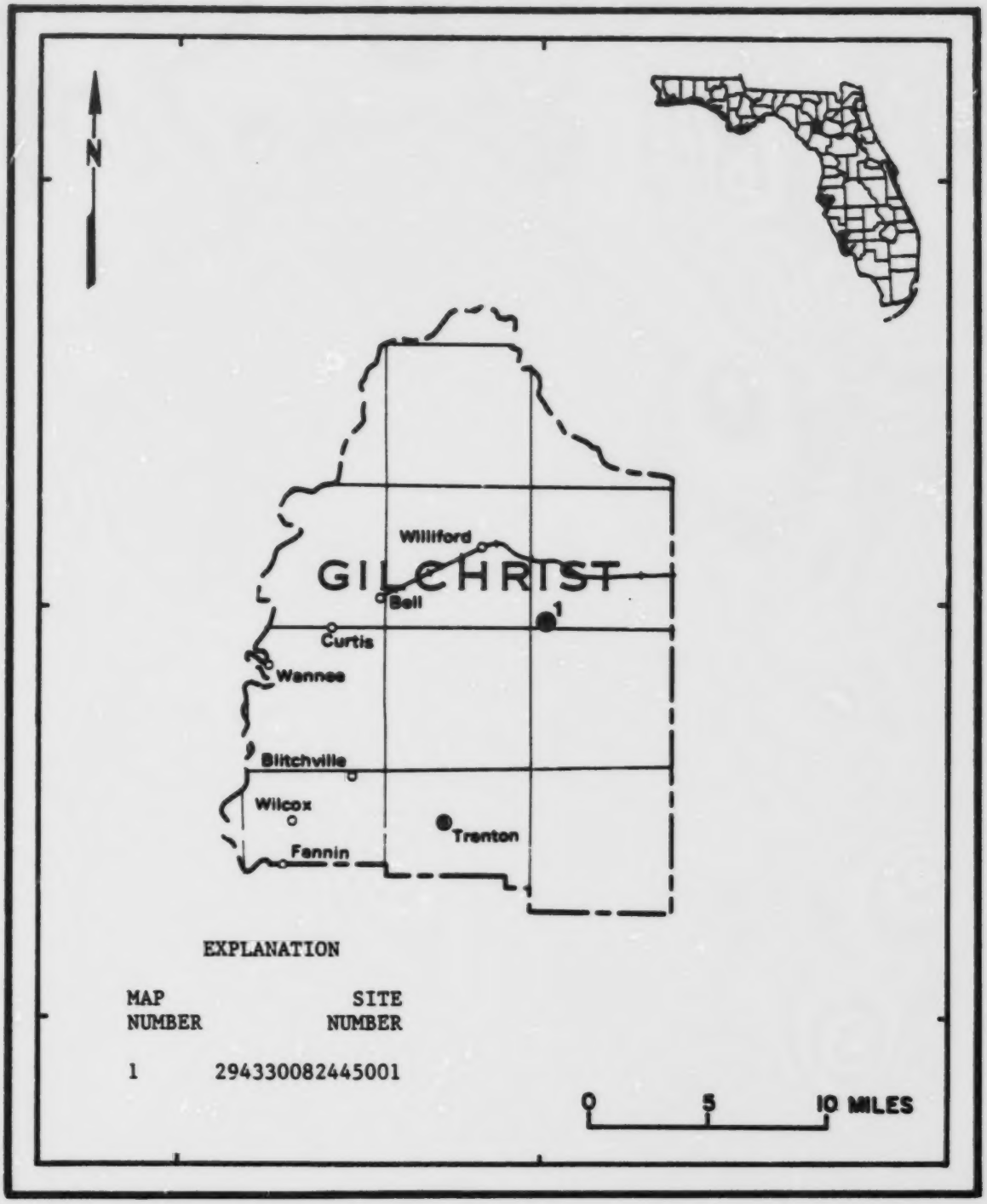

Figure 29. Location of wells in Gilchrist County

GILCHRIST COUNTY

WELL NUMBER.--294330082445001. USGS Observation Well near Trenton, FL.

LOCATION.--Lat 29°43'30", long 82°44'50", in NW¼NW¼NE¼ sec.7, T.9 S., R.16 E., Hydrologic Unit 03110206, on south west corner of intersection of State Highways 47 and 232, 8.5 mi north of Trenton.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 in., depth 101 ft, cased to 55 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.75 ft above land-surface datum.

DATUM.--Land-surface datum is 84.56 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1964 to May 1965 (bimonthly), June 1965 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 74.68 ft NGVD, Oct. 10, 1965; lowest, 44.26 ft NGVD, Jan. 20, 21, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	68.03	64.41	61.55	58.96	59.63	63.66	62.14	59.22	56.81	55.25	54.35	58.99
10	67.42	63.96	61.01	59.51	60.25	63.30	61.62	58.81	56.45	54.98	54.32	59.62
15	66.87	63.45	60.50	60.08	62.19	63.01	61.09	58.37	---	54.69	54.36	60.67
20	66.26	62.94	60.10	60.36	63.39	63.28	60.58	57.99	55.97	54.39	54.79	60.75
25	65.55	62.50	59.71	60.27	63.89	63.04	60.12	57.61	55.80	54.16	56.43	60.38
EOM	64.57	62.07	59.13	59.92	63.93	62.66	59.68	57.16	55.54	54.12	57.69	59.93
TOTAL	2066.00	1901.80	1875.30	1854.59	1730.08	1960.40	1832.44	1808.31	1406.00	1694.51	1709.10	1798.05
MEAN	66.65	63.39	60.49	59.83	61.79	63.24	61.08	58.33	56.24	54.66	55.13	59.94
MAX	68.37	64.54	61.98	60.38	64.00	63.90	62.56	59.59	57.09	55.48	57.69	60.81
MIN	64.57	62.07	59.13	58.88	59.48	62.66	59.68	57.16	55.54	54.05	54.09	57.98

WTR YR 1986 TOTAL 21636.58 MEAN 60.10 MAX 68.37 OCT 1 MIN 54.05 JUL 28

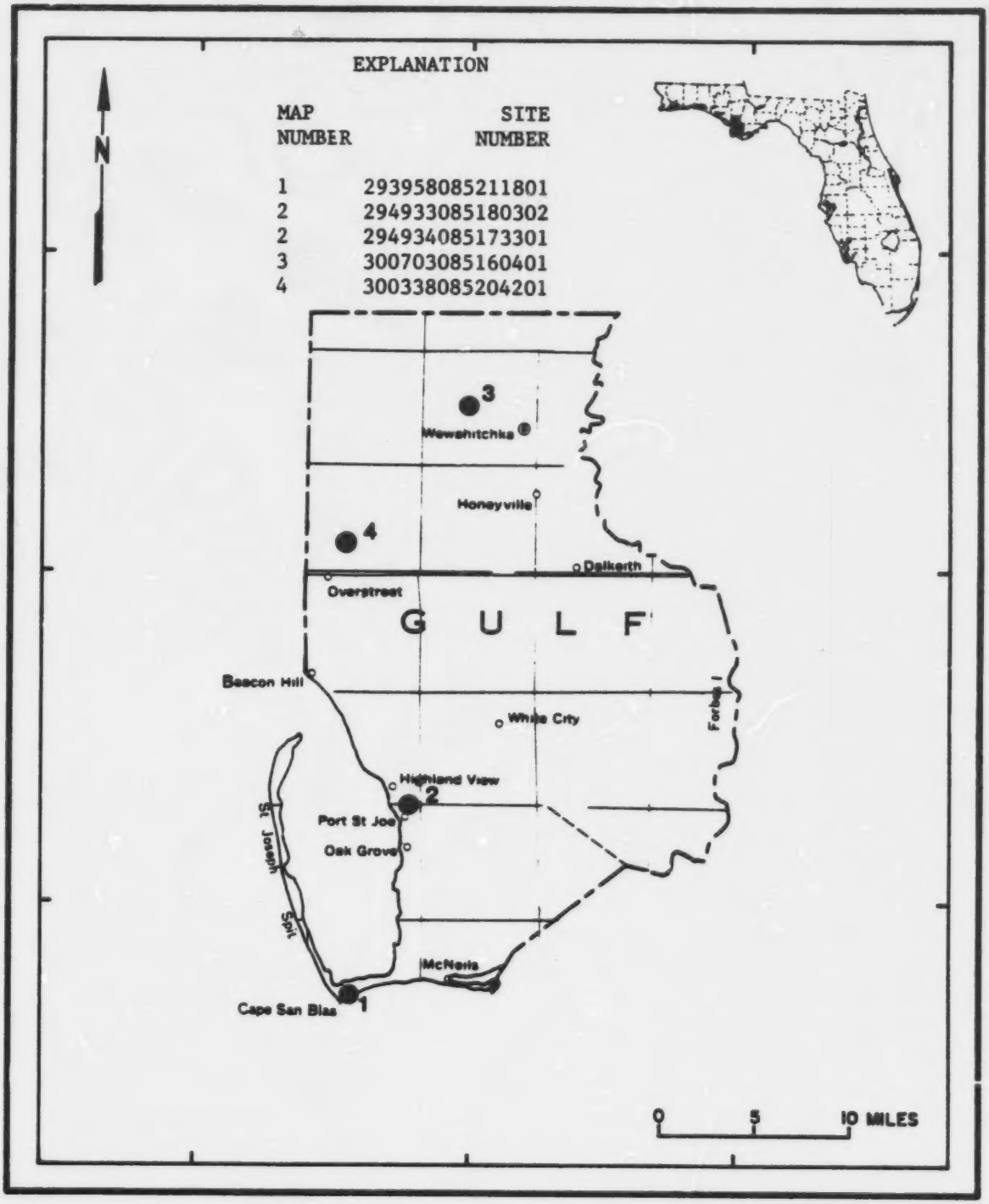

Figure 30. Location of wells in Gulf County

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GULF COUNTY

WELL NUMBER.--293958085211801. Local Number D3A. U.S. Air Force Well near Port St. Joe, FL.

LOCATION.--Lat 29°39'58", long 85°21'18", in NE¼NE¼SE¼ sec.29, T.9 S., R.11 W., Hydrologic Unit 03140101, 0.3 mi south of Cape San Blas Lighthouse, 3.2 mi west of intersection of State Highway 30E and U.S. Highway 98, and 10 mi southwest of Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 595 ft, cased to 487 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of bushing, 1.48 ft above land-surface datum.

DATUM.--Land-surface datum is 7.24 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--April 1961 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 9.44 ft NGVD, Apr. 27, 1961; lowest measured, 6.00 ft NGVD, May 18, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
09...	1410	7.82	14...	1355	8.00
NOV			JUL		
15...	1330	7.72	23...	1450	6.47
FEB			SEP		
03...	1350	7.51	08...	1130	7.85
APR					
01...	1300	7.67			

WELL NUMBER.--294933085180302. Town of Port St. Joe Well Number 1 at Port St. Joe, FL.

LOCATION.--Lat 29°49'33", long 85°18'03", SW¼NE¼NW¼ sec.36, T.7 S., R.11 W., Hydrologic Unit 03140104, in fenced area on east side of water treatment plant at Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter, depth and length of casing unknown.

DATUM.--Elevation of land-surface datum is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water quality records prior to October 1984 are in the files of the U.S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1981 to current year (bimonthly).

CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV					MAY				
15...	1300	635	24.5	19	14...	1240	690	25.0	20
FEB					JUL				
03...	1315	662	24.5	23	23...	1320	620	24.5	19
APR					SEP				
01...	1200	680	25.5	21	08...	1230	610	25.0	15

GULF COUNTY

WELL NUMBER.--294934085173301. St. Joe Paper Company Well at Port St. Joe, FL.

LOCATION.--Lat 29°49'34", long 85°17'33", NW¼NE¼SE¼ sec.36, T.7 S., R.11 W., Hydrologic Unit 03140101, about 100 ft south of canal, 0.55 mi northeast of water treatment plant at Port St. Joe.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 16 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in hole in pumpbase 1.3 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--May 1980 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 0.20 ft NGVD, Jan. 13, 1982, lowest measured -9.25 ft NGVD, May 27, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
09...	0745	-4.03	14...	1230	-4.99
NOV			JUL		
15...	1250	-2.50	23...	1330	-4.87
FEB			SEP		
03...	1300	-3.68	08...	1220	-3.50
APR					
01...	1200	-3.07			

WELL NUMBER.--300338085204201. FICO Farms well near Overstreet, FL.

LOCATION.--30°20'42", in SW¼NE¼SE¼ sec.9, T.5 S., R.11 W., Hydrologic Unit 03140101, on south side of unpaved farm road about 600 ft east of an irrigation supply well, 1.7 mi east of Wetappo Creek and 8.0 mi northeast of Overstreet.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled unused irrigation, artesian well, diameter 6 in., depth 600 ft., casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 6 in. casing, 1.5 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water levels affected by pumping of nearby wells.

PERIOD OF RECORD.--November 1982 to May 1985 (semiannually). October 1985 to October 1986 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 21.08 ft NGVD, May 18, 1983, lowest measured, -11.97 ft NGVD, May 11, 1984.

ELEVATION, IN FEET NGVD, WATER YEAR 1985 TO 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
09...	0715	18.34	14...	1140	16.60
NOV			JUL		
15...	1220	18.79	23...	1240	16.50
FEB			SEP		
03...	1130	19.74	08...	1200	18.60
APR					
01...	1130	20.20			

GULF COUNTY

WELL NUMBER.--300703085160401. Exxon Supply Well near Wewahitchka, FL.

LOCATION.--Lat 30°07'03", long 85°16'04", in SW¼NE¼SW¼ sec. 20, T.4 S., R.10 W., Hydrologic Unit 03140101, 300 ft east of dirt road, 2.0 mi south of State Highway 22, 4.5 mi west of Wewahitchka.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, supply, unused, artesian well, diameter 8 in., depth 242 ft, cased to 232 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of shelter floor 3.18 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 41 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--November 1980 to April 1981 (bimonthly); May 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 29.60 ft NGVD, Apr. 23, 1983; lowest 17.35 ft NGVD, June 28, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	---	26.50	27.37	27.84	28.13	26.57	22.54	20.65	22.24	22.92	25.07
10	---	---	26.63	27.57	28.06	28.17	26.37	21.82	21.37	22.83	23.30	25.17
15	---	---	26.74	27.42	27.99	28.32	26.10	20.68	21.65	22.84	23.80	25.30
20	---	---	26.91	27.60	28.12	28.28	24.99	20.61	22.32	22.42	24.17	24.72
25	---	26.15	27.14	27.66	28.11	27.99	24.26	21.29	22.76	22.15	24.46	24.35
EOM	---	26.47	27.34	27.56	28.20	27.31	23.69	20.19	22.13	22.86	24.76	22.85
TOTAL	102.97	157.77	832.26	852.13	783.70	870.43	767.15	663.65	650.84	697.66	737.79	741.15
MEAN	25.74	26.30	26.85	27.49	27.99	28.08	25.57	21.41	21.69	22.51	23.80	24.71
MAX	25.81	26.47	27.34	27.75	28.26	28.42	27.16	23.48	22.76	22.93	24.76	25.30
MIN	25.69	26.15	26.38	27.26	27.55	27.31	23.69	20.19	20.07	21.95	22.84	22.85

WTR YR 1986 TOTAL 7857.50 MEAN 25.02 MAX 28.42 MAR 14 MIN 20.07 JUN 2

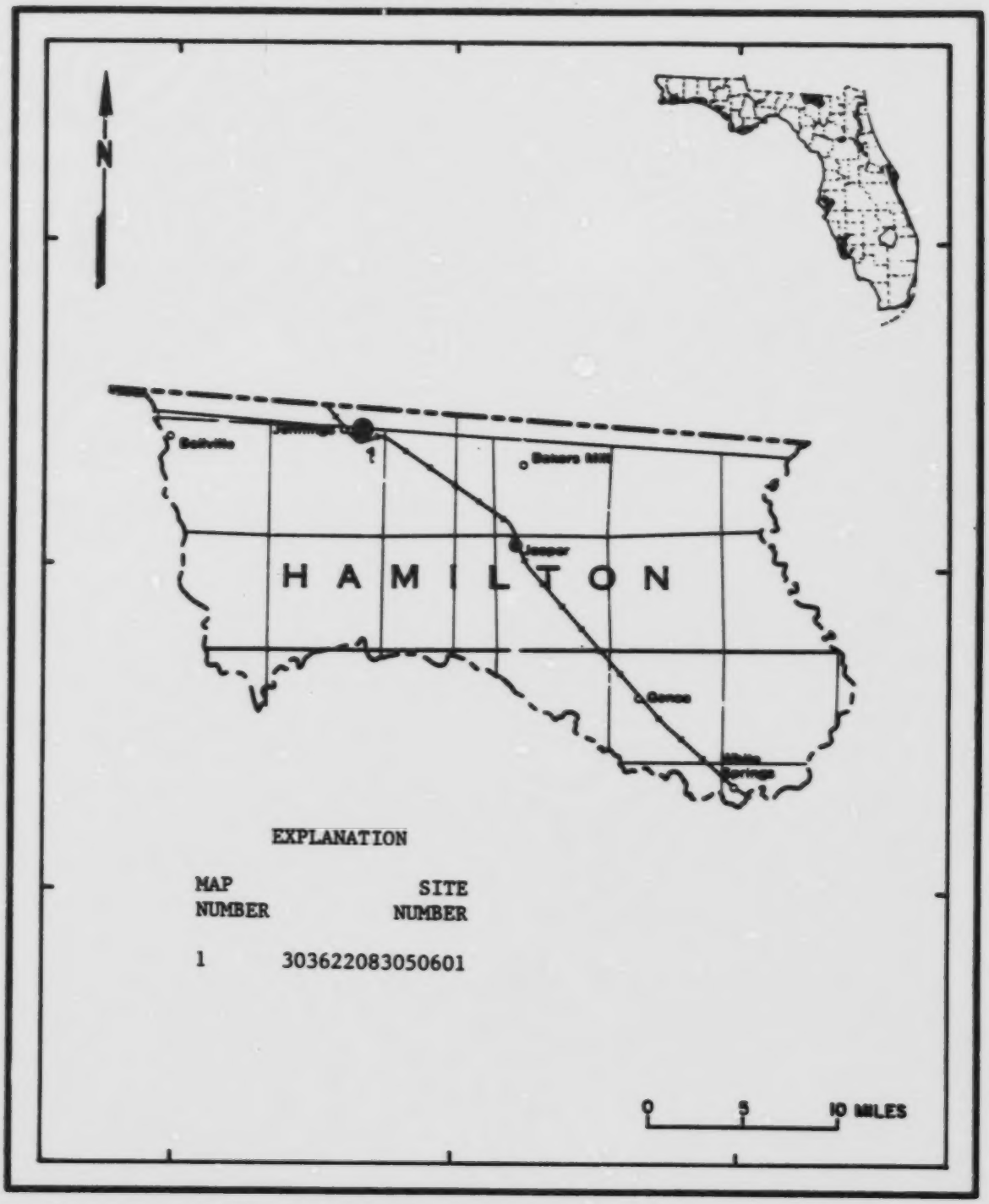

Figure 31. Location of wells in Hamilton County

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HAMILTON COUNTY

WELL NUMBER.--303622083050601. Ben Bates well at Jennings, FL.

LOCATION.--Lat 30°36'22", long 83°05'06", in NW¼SE¼NE¼ sec.2, T.2 N., R.12 E., Hydrologic Unit 03110202, 0.7 mi northeast of Jennings and 1.3 mi south of Florida - Georgia state line.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 10 in., depth 273 ft, cased to 60 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Bottom of discharge pipe, 2.0 ft above land-surface datum.

DATUM.--Land-surface datum is 147.83 ft above National Geodetic Vertical Datum of 1929. Prior to September 25, 1984, land-surface datum was reported as 148.70 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January to July 1961 (semiannually); March 1962 to October 1978 (bimonthly); February 1979 to July 1981 (semiannually); April 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 69.81 ft NGVD, Feb. 19, 1986; lowest 34.91 ft NGVD, October 31, 1978. Water level was lower on Nov. 4, 1988, when water was below pump column.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
23...	1235	37.63	27...	1255	40.63
DEC			JUN		
06...	1000	46.90	19...	1025	38.92
23...	1200	52.53	JUL		
JAN			29...	1010	35.85
29...	1055	53.57	AUG		
FEB			27...	0755	36.78
19...	1035	69.81	SEP		
MAR			23...	1440	36.48
24...	1105	56.78			
APR					
22...	1155	46.52			

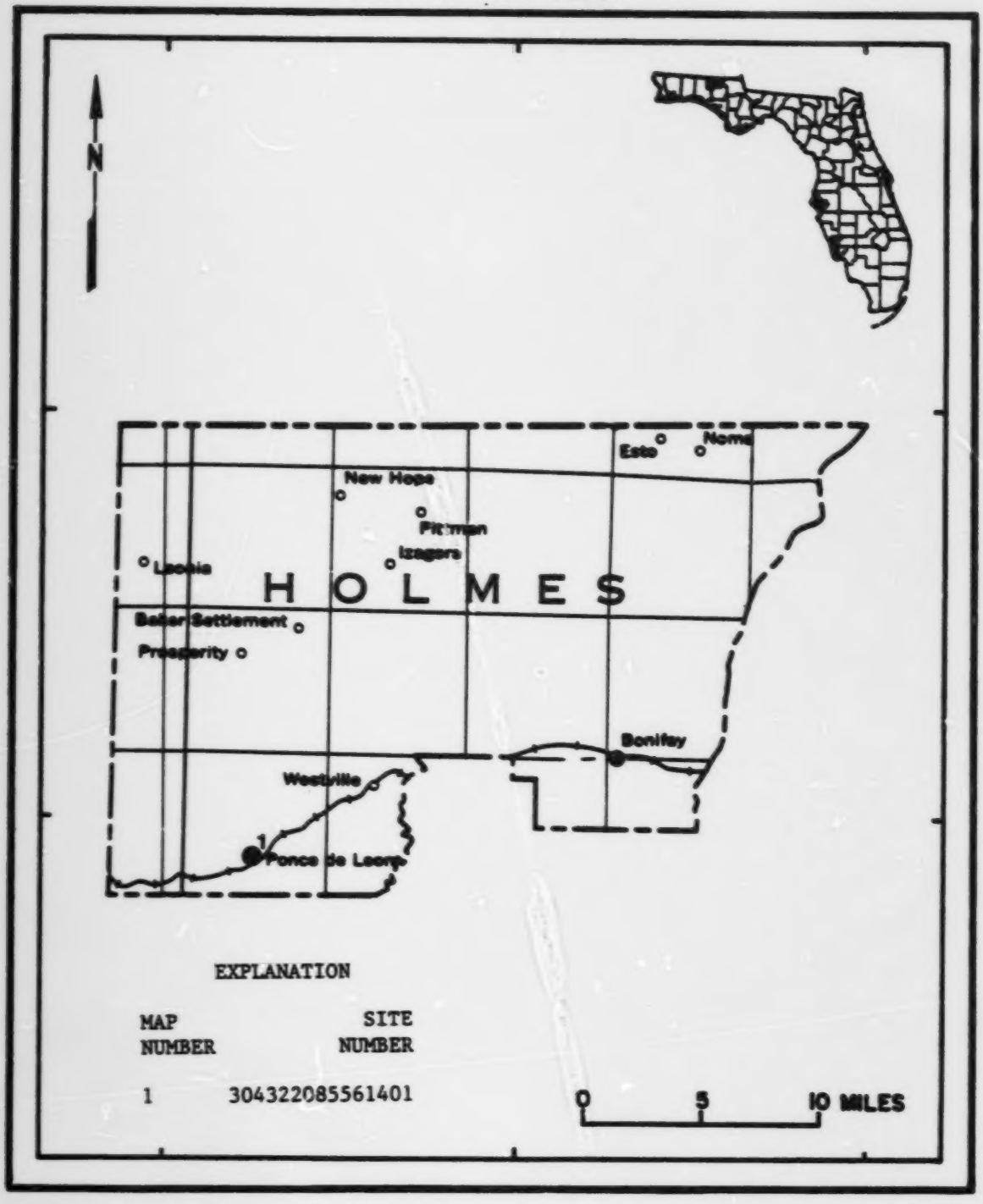

Figure 32. Location of wells in Holmes County

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HOLMES COUNTY

WELL NUMBER.--304322085361401. Local Number 4. Mrs. Dan Hughes Well at Ponce de Leon, FL.

LOCATION.--Lat 30°43'22", long 85°36'14", in SE¼NE¼SE¼ sec.28, T.4 N., R.17 W., Hydrologic Unit 03140203, at water tower, south of Louisville and Nashville Railroad tracks at Ponce de Leon.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 6 in, depth 187 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of reducing tee, 1.50 ft above land-surface datum.

DATUM.--Land-surface datum is 62.18 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water levels affected by pumping at times.

PERIOD OF RECORD.--June 1938 (annually); September 1947 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.08 ft NGVD, May 6, 1964; lowest measured, 62.17 ft NGVD, July 22, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 14...	1550	63.09	MAY 12...	1810	63.08
FEB 05...	0755	65.83	JUL 22...	1115	62.17
APR 03...	1415	65.38	SEP 09...	1530	62.28

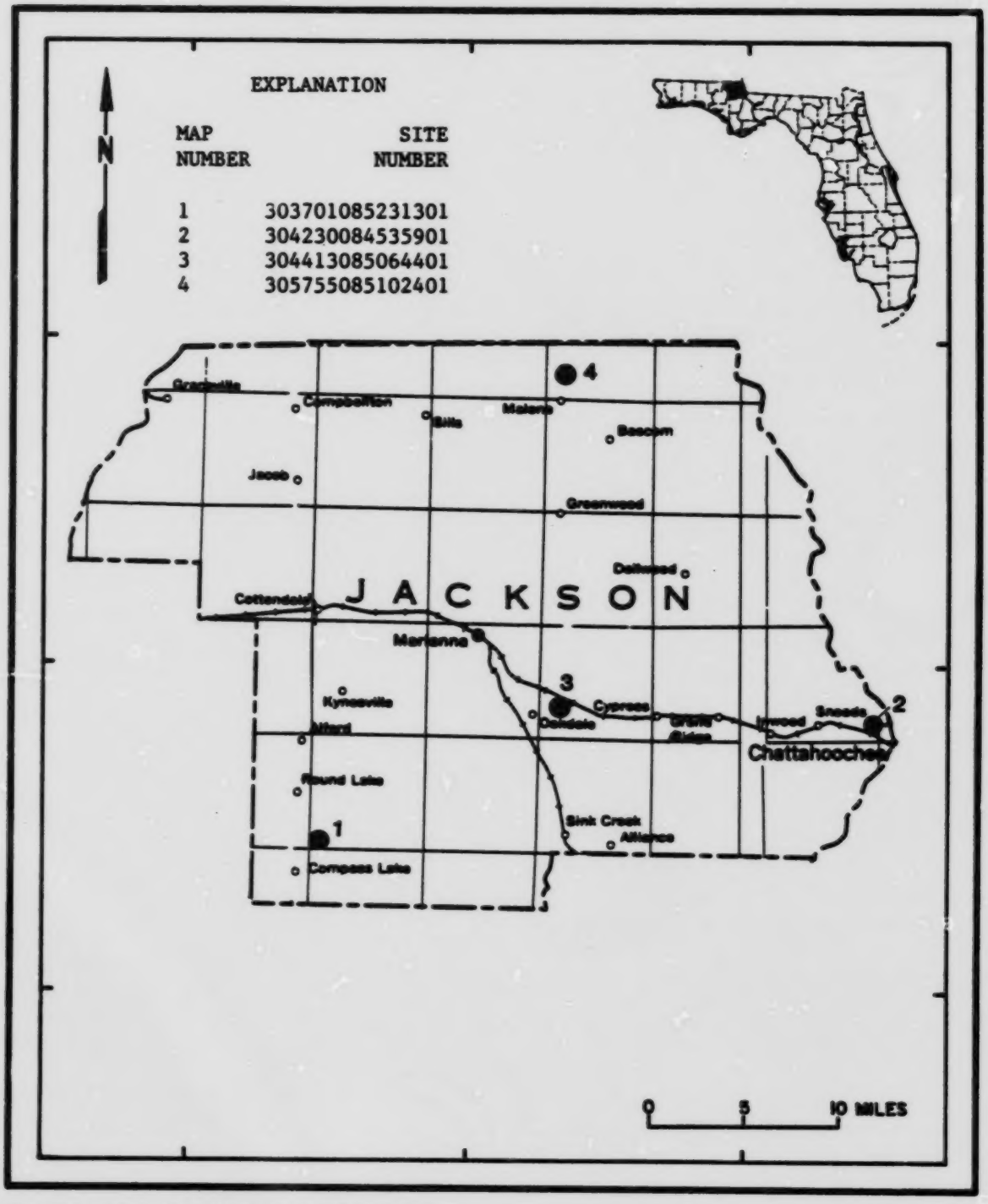

Figure 33. Location of wells in Jackson County

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JACKSON COUNTY

WELL NUMBER.--303701085231301. Florida Forest Service Observation Well near Compass Lake, FL.

LOCATION.--Lat 30°37'01", long 85°23'13", in NE¼NE¼SE¼ sec.36, T.3 N., R.11 W., Hydrologic Unit 03140101, 100 ft east of U.S. Highway 231, 1.0 mi north of Compass Lake.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, unused, artesian well, diameter 4 in., depth 522 ft, cased to 433 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in. casing, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 305 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--May 1980 (annually); October 1981 to September 1982 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.90 ft NGVD, June 21, 1984; lowest measured, 97.20 ft NGVD, Jan. 21, 1982.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 03...	1315	98.65	MAY 12...	1405	103.06
NOV 14...	1025	98.77	JUL 22...	0715	101.50
APR 02...	1150	103.85	SEP 10...	1016	100.01

WELL NUMBER.--304230084535901. Homer Hirt well near Sneads, FL.

LOCATION.--Lat 30°42'32", long 84°53'59", in SE¼SW¼SE¼ sec.26, T.4 N., R.7 W., Hydrologic Unit 03130004, 200 ft north of U.S. Highway 90, 1.55 mi east of intersection of U.S. Highway 90 and State Highway 286 at Sneads.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 101 ft, cased to 70 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 1.45 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 98 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 80.48 ft NGVD, Mar. 1, 1984; lowest measured, 70.96 ft NGVD, Sept. 18, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 18...	1135	71.97	MAY 22...	1545	74.19
FEB 03...	1030	76.67	JUL 23...	1410	71.85
APR 23...	0855	75.97	SEP 18...	1255	70.96

JACKSON COUNTY

WELL NUMBER.--304413085064401. Local Number 46. International Paper Corporation Well near Cypress, FL.

LOCATION.--Lat 30°44'13", long 85°06'44", in NW¼SW¼NW¼ sec.23, T.4 N., R.9 W., Hydrologic Unit 03130012, 600 ft south of U.S. Highway 90 and 2.0 mi west of intersection of U.S. 90 and SR 275 at Cypress.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, observation, artesian well, diameter 4 in, depth 210 ft, cased to 94 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of steel plate, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 186.75 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to July 1964 (bimonthly); January 1965 to May 1977 (semiannually); November 1977 to current year (bimonthly). Records of water levels prior to October 1975 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 106.89 ft NGVD, May 7, 1984; lowest measured, 82.18 ft NGVD, Jan. 6, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
18...	1225	85.01	22...	1625	95.98
FEB			JUL		
03...	1120	93.35	24...	1040	90.75
APR			SEP		
23...	0950	98.35	18...	1335	87.73

WELL NUMBER.--305755085102401. Hollingsworth Well near Malone, FL.

LOCATION.--Lat 30°57'55", long 85°10'24", in SE¼SW¼NW¼ sec.31, T.7 N., R.9 W., Hydrologic Unit 03130012, 0.4 mi north of State Highway 2, and 0.7 mi west of State Highway 71, near Malone.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 90 ft, cased to 60 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 147 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--November 1982 to September 1983.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 124.65 ft NGVD, May 21, 1983; lowest measured, 99.21 ft NGVD, Oct. 28, 1985.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	99.84	99.67	102.63	107.08	110.87		---	119.00	114.53	110.98	107.57	104.86
10	99.71	99.70	103.17	107.88	115.60		---	---	113.84	110.44	107.11	104.48
15	99.57	99.71	104.57	108.92	---		---	---	113.24	109.89	106.66	104.11
20	99.44	99.69	105.53	109.69	---		---	---	112.68	109.35	106.21	103.77
25	99.31	101.17	106.04	110.18	---		120.66	115.90	112.08	108.76	105.75	103.44
EOM	99.47	101.80	106.58	110.27	---		119.90	115.15	111.52	108.09	105.24	103.11
MEAN	99.57	100.15	104.49	108.82	112.32		120.42	117.15	113.22	109.77	106.57	104.10
MAX	99.96	101.80	106.58	110.29	118.37		120.84	119.71	115.04	111.40	107.98	105.17
MIN	99.25	99.50	101.95	106.63	110.29		119.90	115.15	111.52	108.09	105.24	103.11

WTR YR 1986 MEAN 107.19 MAX 120.84 APR 23 MIN 99.25 OCT 28

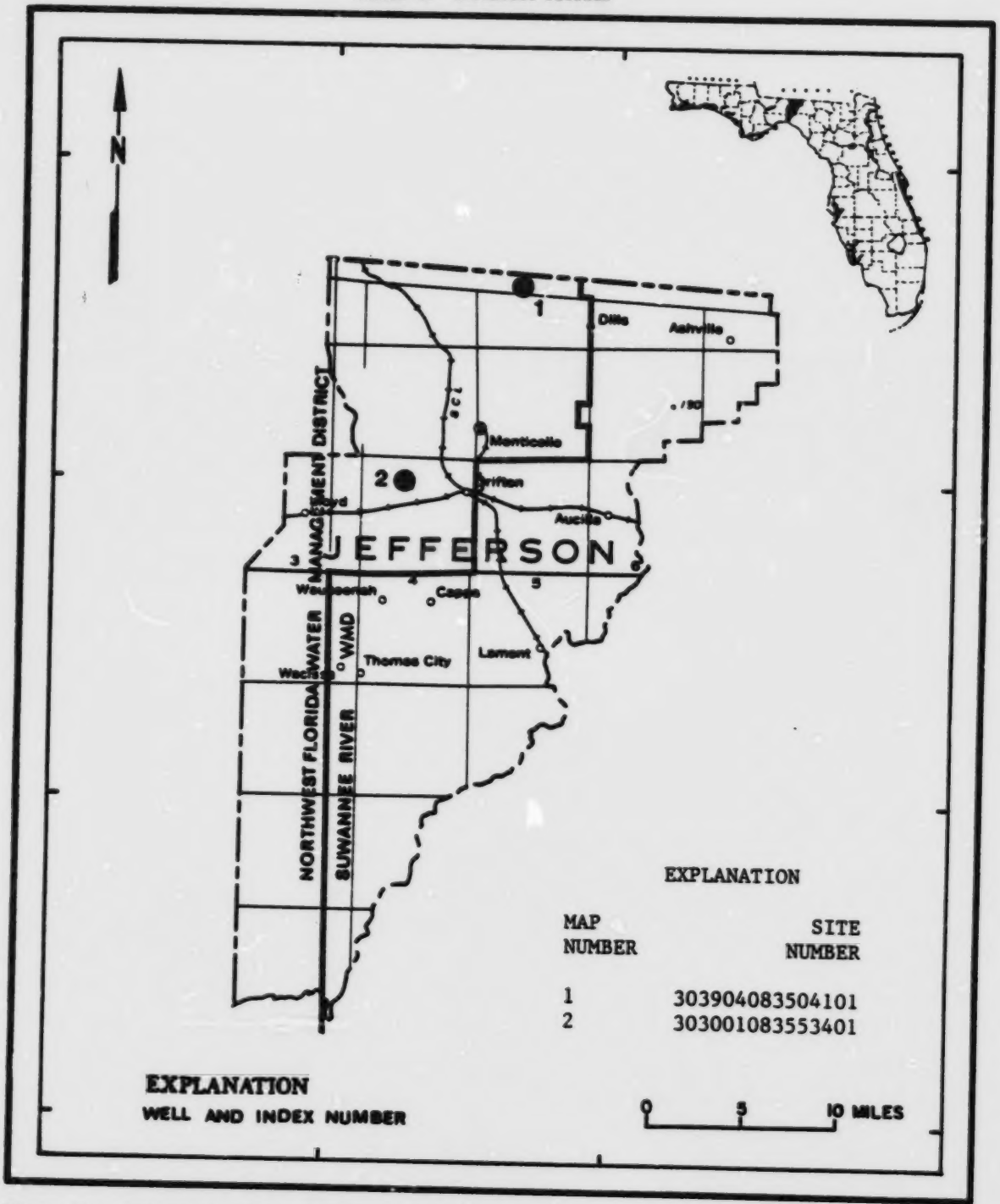

Figure 34. Location of wells in Jefferson County

JEFFERSON COUNTY

WELL NUMBER.--303001083553401. Joseph Bellamy Well near Monticello, FL.

LOCATION.--Lat 30°30'01", long 83°55'34", in SW¼SE¼NE¼ sec.9, T.1 N., R.4 E., Hydrologic Unit 03120001, 1.2 mi west of SR 259, 2.1 mi east of S-158, and 4.5 mi southwest of Monticello.

AQUIFER.--Floridan aquifer of the Teritiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 175 ft, cased to 139 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 0.70 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 175 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 41.95 ft NGVD, May 6, 1983; lowest measured, 33.15 ft NGVD, Jan. 4, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 01...	1225	35.37	MAY 20...	0945	38.75
DEC 03...	1305	37.42	JUL 17...	1550	36.45
FEB 05...	1630	40.34	AUG 26...	1635	36.17
APR 14...	0850	41.43			

WELL NUMBER.--303904083504101. Lake Fontain well at Merrily Plantation near Monticello, FL.

LOCATION.--Lat 30°39'04", long 83°50'41", in land grant 150, T.3 N., R.5 E., Hydrologic Unit 03110103, about 0.4 mi. south of Florida-Georgia border, 1.9 mi. west of U.S. Highway 19 and 7.5 mi. northeast of Monticello.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in., depth 269 ft., cased to 148 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.0 ft. above land-surface datum. Prior to Aug. 28, 1981, tape measured.

DATUM.--Elevation of land-surface datum is 190 ft. above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--June to August 1981 (monthly); August 1981 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 77.62 ft. NGVD, May 3, 1984; lowest, 65.32 ft. NGVD, Jan. 4, 1983.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	69.65	69.50	70.26	71.81	73.10	75.21	76.12	75.70	74.87	73.90	73.04	72.68
10	69.66	69.59	70.30	72.29	73.59	75.53	76.30	75.52	74.61	73.79	72.99	72.47
15	69.50	69.73	70.48	72.15	74.00	75.75	76.21	75.33	74.49	73.67	72.91	72.38
20	69.48	69.90	70.97	72.56	74.45	75.90	76.26	75.38	74.37	73.63	72.82	72.33
25	69.44	69.88	71.36	72.79	74.78	75.88	75.97	75.19	74.22	73.41	72.76	72.23
EOM	69.65	70.06	71.68	72.69	75.01	76.19	75.90	75.08	74.13	73.25	72.61	72.13
TOTAL	2154.79	2092.88	2193.59	2240.72	2069.54	2345.57	2284.51	2338.69	2235.44	2282.82	2259.46	2172.26
MEAN	69.51	69.76	70.76	72.28	73.91	75.66	76.15	75.44	74.51	73.64	72.89	72.41
MAX	69.71	70.42	71.68	72.97	75.19	76.19	76.45	76.00	75.03	74.09	73.24	72.68
MIN	69.35	69.42	69.94	71.59	72.71	74.91	75.87	75.04	74.13	73.25	72.54	72.13

WTR YR 1986 TOTAL 26670.27 MEAN 73.07 MAX 76.45 APR 8 MIN 69.35 OCT 18

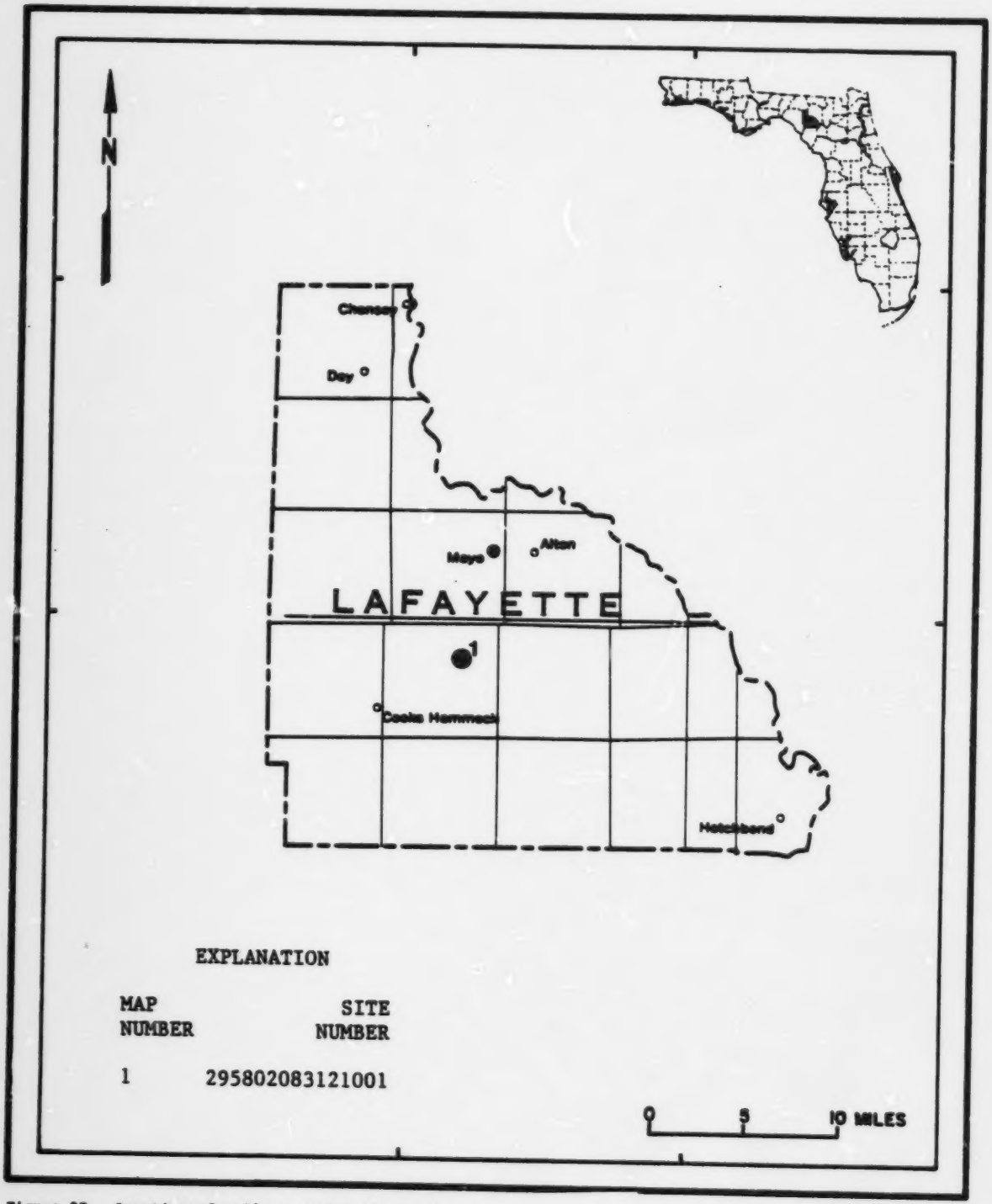

Figure 35. Location of wells in Lafayette County

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LAFAYETTE COUNTY

WELL NUMBER.--295802083121001. Lester McCray Well near Mayo, FL.

LOCATION.--Lat 29°58'02", long 83°12'10", in NW¼NW¼NW¼ sec.14, T.6 S., R.11 E., Hydrologic Unit 03110102, 0.6 mi southeast of State Highway 51, 5.0 mi northeast of Cooks Hammock and 5.8 mi south of Mayo.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 6 in., depth 146 ft, cased to 112 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top edge of recorder shelf, 3.63 ft above land-surface datum.

DATUM.--Land-surface datum is 73.85 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--February 1961 to March 1976 (bimonthly); May 1976 to September 1984; October 1984 to September 1985 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 70.71 ft NGVD, Apr. 9, 1983; lowest measured, 62.13 ft NGVD, Nov. 4, 1968.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
23...	1105	67.48	28...	1050	64.94
DEC			JUN		
05...	1025	68.76	25...	1130	66.36
31...	1000	68.20	JUL		
JAN			28...	1020	64.89
28...	0830	69.33	AUG		
FEB			22...	0750	69.69
20...	0745	69.91	SEP		
MAR			25...	1150	67.71
24...	1020	69.00			
APR					
23...	0730	66.44			

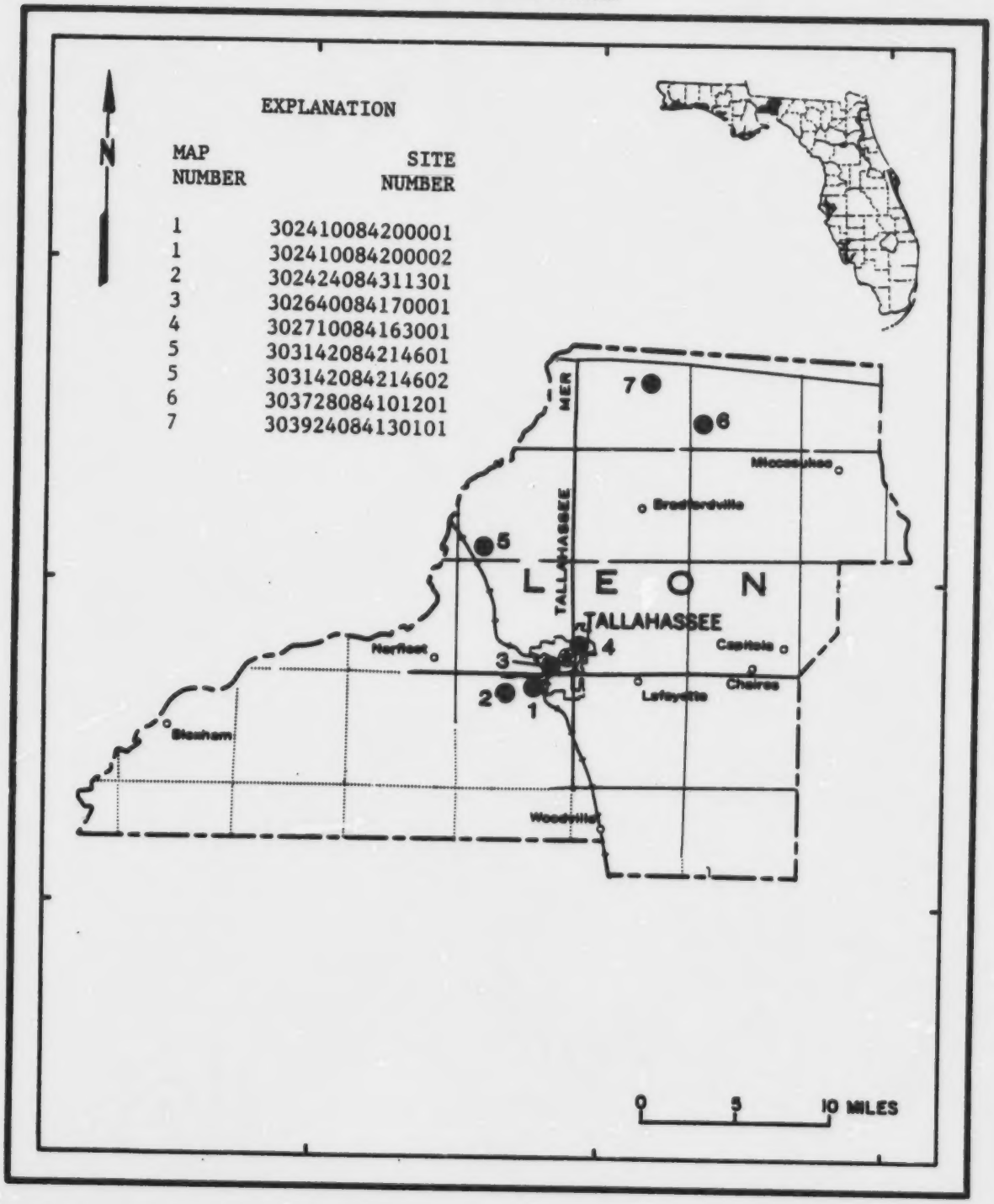

Figure 36. Location of wells in Leon County

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LEON COUNTY

WELL NUMBER.--302410084200001. Local number 150. Florida State University well near Tallahassee, FL.

LOCATION.--Lat 30°24'10", long 84°20'00", in NW¼SW¼NE¼ sec.16, T.1 S., R.1 W., Hydrologic Unit 03120001, 250 ft west of Lake Bradford Road and 4.0 mi southwest of State Capitol in Tallahassee, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 57 ft, cased to 57 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 37.51 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1960 to February 1965; April 1965 to September 1972 (bimonthly); September 1972 to September 1979; October 1979 to May 1981 (semiannually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 31.95 ft NGVD, Apr. 12, 1973; lowest, 18.20 ft NGVD, June 27, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
DEC 04...	1115	28.53	MAY 20...	1550	27.55
FEB 05...	1120	29.21	JUL 16...	0950	25.30
APR 09...	0910	29.92	SEP 08...	1535	26.83

WELL NUMBER.--302410084200002. Local number 150A. Florida State University well near Tallahassee, FL.

LOCATION.--Lat 30°24'10", long 84°20'00", in NW¼SW¼NE¼ sec.16, T.1 S., R.1 W., Hydrologic Unit 03120001, 250 ft west of Lake Bradford Road and 4.0 mi southwest of State Capitol in Tallahassee, FL.

AQUIFER.--Nonartesian sand aquifer of the Quaternary System, Geologic Unit 110 NRSD.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1¼ in., depth 15 ft, cased to 12 ft, well point from 12 to 15 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 37.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--May 1960 to October 1979 (bimonthly); October 1979 to May 1981 (semiannually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.16 ft NGVD, Apr. 4, 1973; lowest measured, 25.66 ft NGVD, June 27, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
DEC 04...	1120	33.55	MAY 20...	1550	31.47
FEB 05...	1115	32.71	JUL 16...	0955	30.26
APR 09...	0915	31.65	SEP 08...	1535	32.04

LEON COUNTY

WELL NUMBER.--302424084311301. City of Tallahassee Airport Well near Tallahassee, FL.

LOCATION.--Lat 30°24'24", long 84°21'13", in NE¼SE¼SW¼ sec. 8, T.1 S., R.1 W., Hydrologic Unit 03120001, 150 ft west of State Highway 263, 0.7 mi northeast of airport control tower, and 5.0 mi southwest of State Capitol at Tallahassee, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, municipal, artesian well, diameter 10 in., depth 194 ft cased to 190 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.65 ft above land-surface datum.

DATUM.--Land-surface datum is 67.18 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 30.58 ft NGVD, April 23, 1984; lowest, 21.22 ft NGVD, JuLY 22, 23, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	---	23.02	24.87	27.49	26.15	29.30	27.78	25.54	23.28	21.72	21.83	23.28
10	---	23.52	25.04	27.31	26.45	29.10	27.45	25.12	22.92	21.61	21.83	23.83
15	---	23.76	25.58	27.09	27.79	28.91	27.10	24.72	22.65	21.46	21.97	23.91
20	---	23.84	26.84	27.00	28.89	28.71	26.72	24.39	22.47	21.34	22.12	23.78
25	22.32	24.24	27.51	26.70	29.30	28.38	26.32	24.06	22.21	21.45	22.43	23.54
EOM	22.17	24.56	27.64	26.32	29.39	28.14	25.94	23.63	21.97	21.84	22.80	23.16
TOTAL	222.69	710.22	808.93	838.23	775.04	893.47	811.34	766.00	680.85	668.74	685.43	707.01
MEAN	22.27	23.67	26.09	27.04	27.68	28.82	27.04	24.71	22.70	21.57	22.11	23.57
MAX	22.47	24.56	27.65	27.63	29.46	29.35	28.07	25.87	23.56	21.92	22.80	23.93
MIN	22.10	22.26	24.62	26.32	26.13	28.14	25.94	23.63	21.97	21.25	21.82	22.87

WTR YR 1986 TOTAL 8567.95 MEAN 24.91 MAX 29.46 FEB 27 MIN 21.25 JUL 22

WELL NUMBER.--302640084170001. Leon 152. State of Florida Observation Well at Tallahassee, FL.

LOCATION.--Lat 30°26'40", long 84°17'00", in NW¼SW¼NE¼ sec.35, T.1 N., R.1 W., Hydrologic Unit 03120001, behind Herman Gunter Building, at corner of West Tennessee Street and Woodward Street, 2.7 mi west of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 to 3 in, depth 310 ft, cased to 146 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 6 in casing, 0.86 ft above land-surface datum. Since October 15, 1960 water-level recorder, used for display purposes only at Herman Gunter Building.

DATUM.--Land-surface datum is 100.52 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1960 (annually); October 1960 to December 1961; January 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 32.76 ft NGVD, July 1, 1965; lowest measured, 18.00 ft NGVD, Nov. 18, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
DEC 10...	1355	26.28	JUL 23...	0910	23.12
MAR 13...	1520	30.13	SEP 24...	1550	24.11
JUN 10...	1355	24.70	25...	0845	24.00

LEON COUNTY

WELL NUMBER.--302710084163001. Local number 7, City of Tallahassee Test Well at Tallahassee, FL.

LOCATION.--Lat 30°27'10", long 84°16'30", in NE¼SW¼SW¼ sec.30, T.1 N., R.1 E., Hydrologic Unit 03120001, in pump house at Lafayette Park, 1.3 mi northeast of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in, depth 314 ft, cased to 165 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.20 ft above land-surface datum.

DATUM.--Land-surface datum is 186.50 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1945 to January 1965; February 1965 to current year (monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level 37.66 ft NGVD, Apr. 26, 1948; lowest 16.42 ft NGVD, June 14, 1955.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 31...	0655	24.41	APR 29...	1045	27.49
NOV 27...	1300	25.81	MAY 30...	1300	26.28
DEC 27...	1550	28.61	JUN 27...	0900	25.05
JAN 30...	0920	28.33	JUL 29...	1405	24.37
FEB 27...	0915	31.18	AUG 27...	0905	24.50
MAR 28...	1400	29.72	SEP 25...	0940	24.84

WELL NUMBER.--303142084214601. USGS Observation Well at Lake Jackson near Tallahassee, FL.

LOCATION.--Lat 30°31'42", long 84°21'46", in NE¼NE¼SE¼ sec.31, T.2 N., R.1 W., Hydrologic Unit 03120003, 0.3 mi south of U.S. Highway 27 and 12 mi northwest of State Capitol at Tallahassee.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in., depth 225 ft, cased to 100 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 3.09 ft above land-surface datum.

DATUM.--Land-surface datum is 122.20 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.94 ft NGVD, May 3, 1984; lowest, 28.04 ft NGVD, Jan. 7, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	34.24	34.10	36.05	38.36	38.36	41.16	41.05	38.76	36.79	35.14	34.15	34.64
10	34.08	34.31	35.96	38.41	39.15	41.38	40.63	38.29	36.33	34.96	34.11	34.48
15	33.81	34.61	36.53	38.34	39.69	41.52	40.37	37.93	36.23	34.73	34.23	34.58
20	33.53	34.83	37.34	38.59	40.48	41.57	40.06	37.91	35.97	34.44	34.20	34.58
25	33.46	35.45	37.90	38.45	40.89	41.32	39.67	37.46	35.56	34.55	34.22	34.22
EOM	33.92	35.68	38.15	38.06	41.09	41.32	39.21	37.13	35.36	34.37	34.50	33.96
TOTAL	1048.18	1042.13	1143.30	1188.60	1110.09	1281.86	1209.96	1179.20	1085.45	1077.81	1061.74	1033.81
MEAN	33.81	34.74	36.88	38.34	39.65	41.35	40.33	38.04	36.18	34.77	34.25	34.46
MAX	34.36	35.68	38.15	38.76	41.28	41.64	41.29	39.22	37.06	35.33	34.50	34.84
MIN	33.40	33.92	35.79	37.98	38.07	40.95	39.21	37.11	35.36	34.33	34.11	33.96

WTR YR 1986 TOTAL 13462.23 MEAN 36.88 MAX 41.64 MAR 14 MIN 33.40 OCT 29

LEON COUNTY

WELL NUMBER.--303142084214602. USGS Observation Well at Lake Jackson near Tallahassee, FL.

LOCATION.--Lat 30°31'42", long 84°21'46", in NE¼NE¼SE¼ sec.31, T.2 N., R.1 W., Hydrologic Unit 03120003, 0.3 mi south of U.S. Highway 27 and 12 mi northwest of State Capitol at Tallahassee.

AQUIFER.--Hawthorn sand-and-gravel aquifer of the Miocene Series, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in, depth 54 ft, cased to 49 ft, screened from 49 to 54 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 3.11 ft above land-surface datum.

DATUM.--Land-surface datum is 122.26 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1966 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 93.85 ft NGVD, Sept. 30, 1966; lowest, 79.43 ft NGVD, Dec. 17, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	82.58	82.31	83.36	85.29	86.35	88.74	89.85	89.76	88.89	87.79	86.69	86.24
10	82.56	82.38	83.45	85.66	86.66	89.09	90.09	89.76	88.61	87.64	86.61	86.01
15	82.50	82.64	83.62	85.50	87.08	89.31	90.06	89.52	88.51	87.41	86.55	85.96
20	82.44	82.90	84.27	85.94	87.84	89.46	90.15	89.48	88.34	87.38	86.47	85.90
25	82.41	82.86	84.88	86.05	88.25	89.49	89.94	89.23	88.18	87.11	86.35	85.92
EOM	82.76	83.20	85.18	85.86	88.58	89.88	89.90	89.11	88.04	86.97	86.14	85.69
TOTAL	2556.99	2481.66	2605.05	2654.22	2440.95	2766.35	2700.64	2775.29	2655.29	2709.88	2681.84	2580.01
MEAN	82.48	82.72	84.03	85.62	87.18	89.24	90.02	89.53	88.51	87.42	86.51	85.00
MAX	82.76	83.61	85.18	86.21	88.68	89.88	90.24	89.91	89.10	87.98	86.94	86.24
MIN	82.26	82.30	83.05	85.08	85.86	88.47	89.85	89.05	88.01	86.97	86.11	85.69

WTR YR 1986 TOTAL 31608.17 MEAN 86.60 MAX 90.24 APR 9 MIN 82.26 OCT 18

WELL NUMBER.--303728084101201. Local number 36A. USGS Observation Well at Dawkins Pond near Bradfordville, FL.

LOCATION.--Lat 30°37'28", long 84°10'12", in SE¼SE¼SW¼ sec.30, T.3 N., R.2 E., Hydrologic Unit 0312003, at Dawkins Pond Church, 100 ft west of U.S. Highway 319, and 5.2 mi north of Bradfordville.

AQUIFER.--Hawthorn sand-and-gravel of the Miocene Series, Geologic Unit 122 HTRNS.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 1¼ in, depth 41 ft, cased to 38 ft, screened from 38 to 41 ft. Well deepened April 1955 from 30 to 41 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.85 ft above land-surface datum.

DATUM.--Land-surface datum is 102.12 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1935 to June 1937 (weekly); July 1942 to March 1943 (monthly); March 1943 to December 1943 (weekly); January 1947 to current year (monthly). Prior to January 1955 published as Leon 36.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 104.07 ft NGVD, Apr. 27, 1965; lowest measured, 88.46 ft NGVD, Feb. 28, 1957.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			MAY		
01...	1825	83.56	20...	1115	95.95
DEC			JUL		
03...	1625	94.43	17...	1155	90.77
FEB			SEP		
06...	1615	99.64	09...	1205	88.59
APR					
08...	1440	99.20			

LEON COUNTY

WELL NUMBER.--303924084130101. Tall Timbers Research Well near Iamonia, FL.

LOCATION.--Lat 30°39'24", long 84°13'01", in NW¼SW¼SW¼ sec.15, T.3 N., R.1 E., Hydrologic Unit 03120003, about 0.3 mi west of Tall Timbers Research Center office, about 0.4 mi south of State Highway 12, and 2.8 mi southwest of Iamonia.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, irrigation, artesian well, diameter 8 in., depth 249 ft, cased 221 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top edge of 6 in. horizontal discharge line, 1.8 ft above land-surface datum.

DATUM.--Land-surface datum is 101.42 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 75.48 ft NGVD, May 3, 1977; lowest measured, 58.82 ft NGVD, Dec. 17, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
01...	1720	63.48	20...	1305	71.94
DEC			JUL		
03...	1645	65.42	17...	1035	69.49
FEB			SEP		
06...	1730	70.71	09 ..	1415	67.72
APR					
08...	1320	74.02			

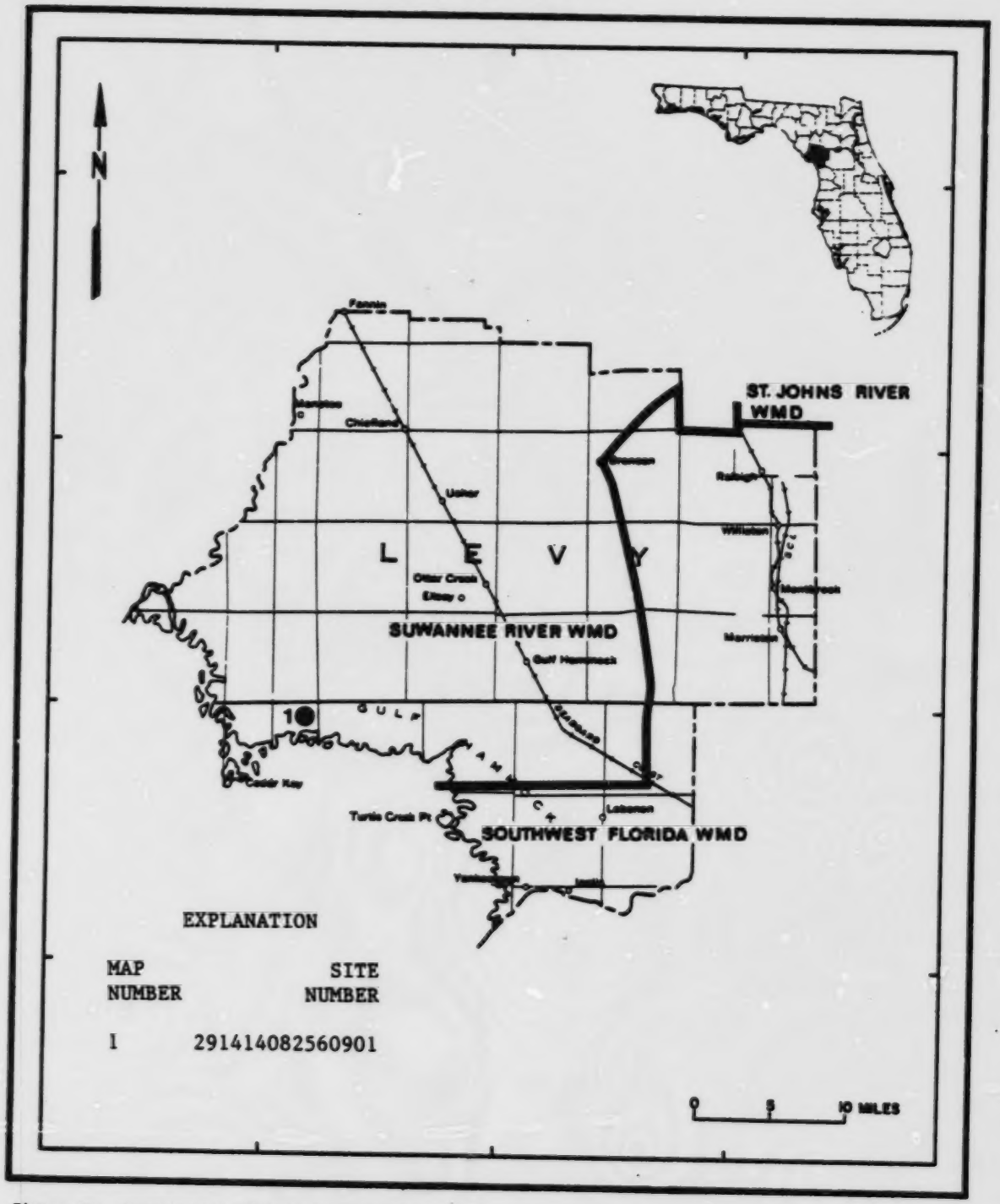

Figure 37. Location of wells in Levy County

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LEVY COUNTY

WELL NUMBER.--291414082560901. Rosewood Tower Well near Cedar Key, FL.

LOCATION.--Lat 29°14'14", long 82°56'09", in SE¼NW¼NW¼ sec.29, T.14 S., R.14 E., Hydrologic Unit 03110101, 50 ft north of SR 24 at Suwannee Lookout Tower, (Rosewood Tower) 9.4 mi northeast of Cedar Key and 11.6 mi southwest of Otter Creek.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 6 to 4 in., depth 442 ft, cased to 422 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.52 ft above land-surface datum.

DATUM.--Land-surface datum is 16.93 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--October 1975 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 11.84 ft NGVD, Sept. 1, 1985; lowest, 8.59 ft NGVD, July 19, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	11.41	11.42	11.09	11.08	11.19	11.28	11.07	10.59	9.93	9.88	10.15	11.42
10	11.29	11.19	10.89	11.31	11.36	11.21	11.14	10.49	9.71	9.85	10.34	11.31
15	11.23	11.15	10.88	11.00	11.28	11.37	11.07	10.30	9.64	9.74	10.75	11.34
20	11.18	11.19	10.88	11.24	11.37	11.37	10.99	10.31	9.82	9.73	11.02	11.24
25	11.24	11.15	11.04	11.18	11.40	11.05	10.84	10.19	9.92	9.53	11.12	11.20
EOM	11.52	11.21	10.93	11.00	11.43	11.14	10.77	10.03	9.88	9.94	11.29	11.07
TOTAL	349.08	337.57	339.83	343.63	315.68	348.03	330.78	321.34	294.47	302.66	331.72	338.66
MEAN	11.26	11.25	10.96	11.08	11.27	11.23	11.03	10.37	9.82	9.76	10.70	11.29
MAX	11.52	11.57	11.19	11.35	11.49	11.39	11.26	10.74	10.02	9.97	11.29	11.42
MIN	11.09	11.11	10.76	10.88	10.96	11.03	10.77	10.00	9.61	9.53	9.99	11.07

WTR YR 1986 TOTAL 3853.45 MEAN 10.83 MAX 11.57 NOV 1 MIN 9.53 JUL 25

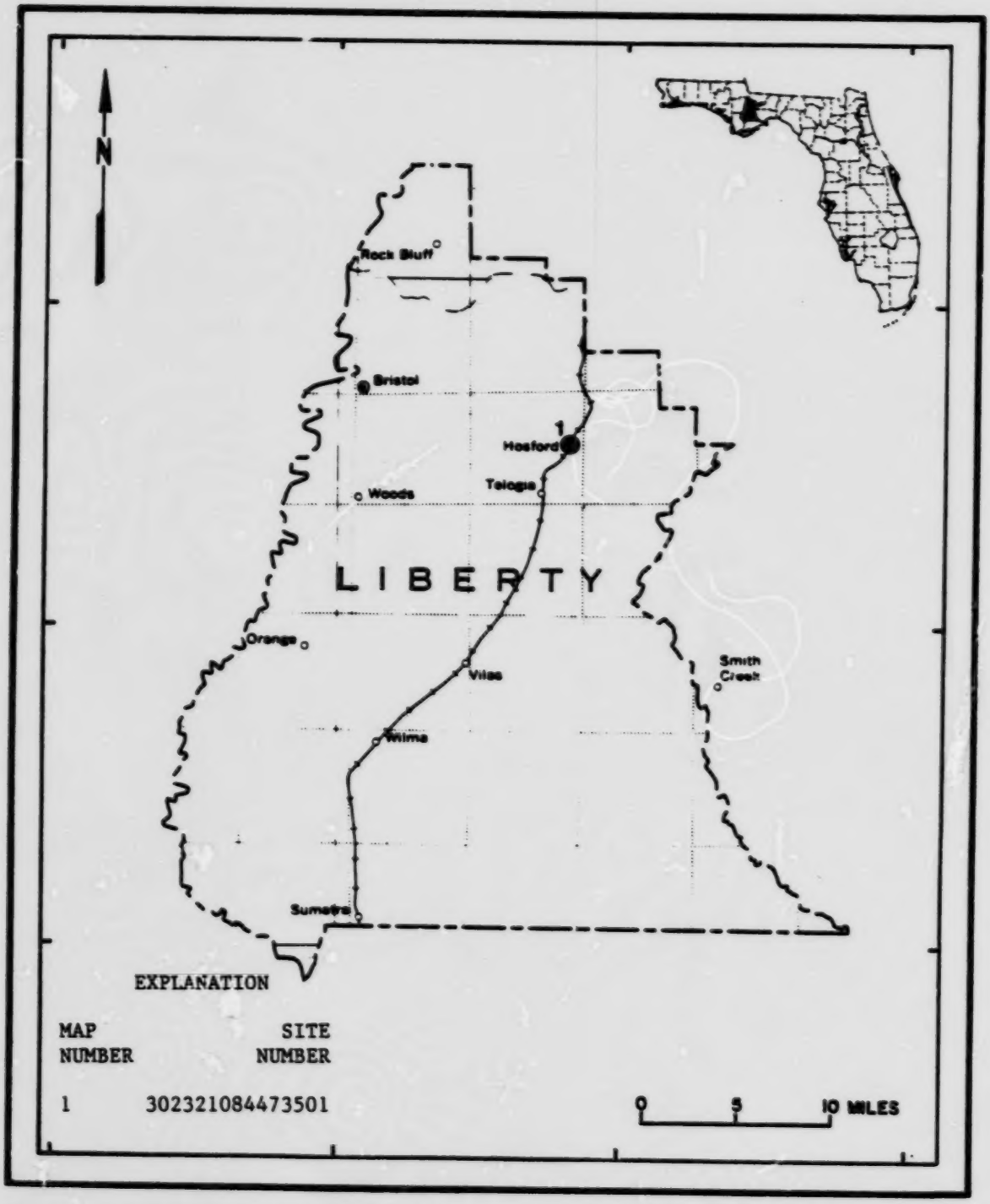

Figure 38. Location of wells in Liberty County

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LIBERTY COUNTY

WELL NUMBER.--302321084473501. C. W. Roberts Well at Hosford, FL.

LOCATION.--Lat 30°23'21", long 84°47'35", in NE¼NE¼SW¼ sec.13, T.1 S., R.6 W., Hydrologic Unit 03120003, north of State Highway 20, 0.4 mi east of intersection of State Highways 65 and 20 at Hosford.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in., depth 85 ft, cased to 70 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 0.80 ft above land-surface datum.

DATUM.--Land-surface datum is 87.01 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1961 to July 1964 (bimonthly); January 1965 to December 1974 (semiannually); January 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 91.91 ft NGVD, May 6, 1965; lowest measured, 86.38 ft NGVD, Dec. 16, 1974.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
04...	1520	89.20	22...	1355	88.02
NOV			JUL		
19...	1050	88.88	18...	1155	87.01
MAR			SEP		
03...	1150	90.24	10...	1645	88.13
APR					
11...	1630	89.44			

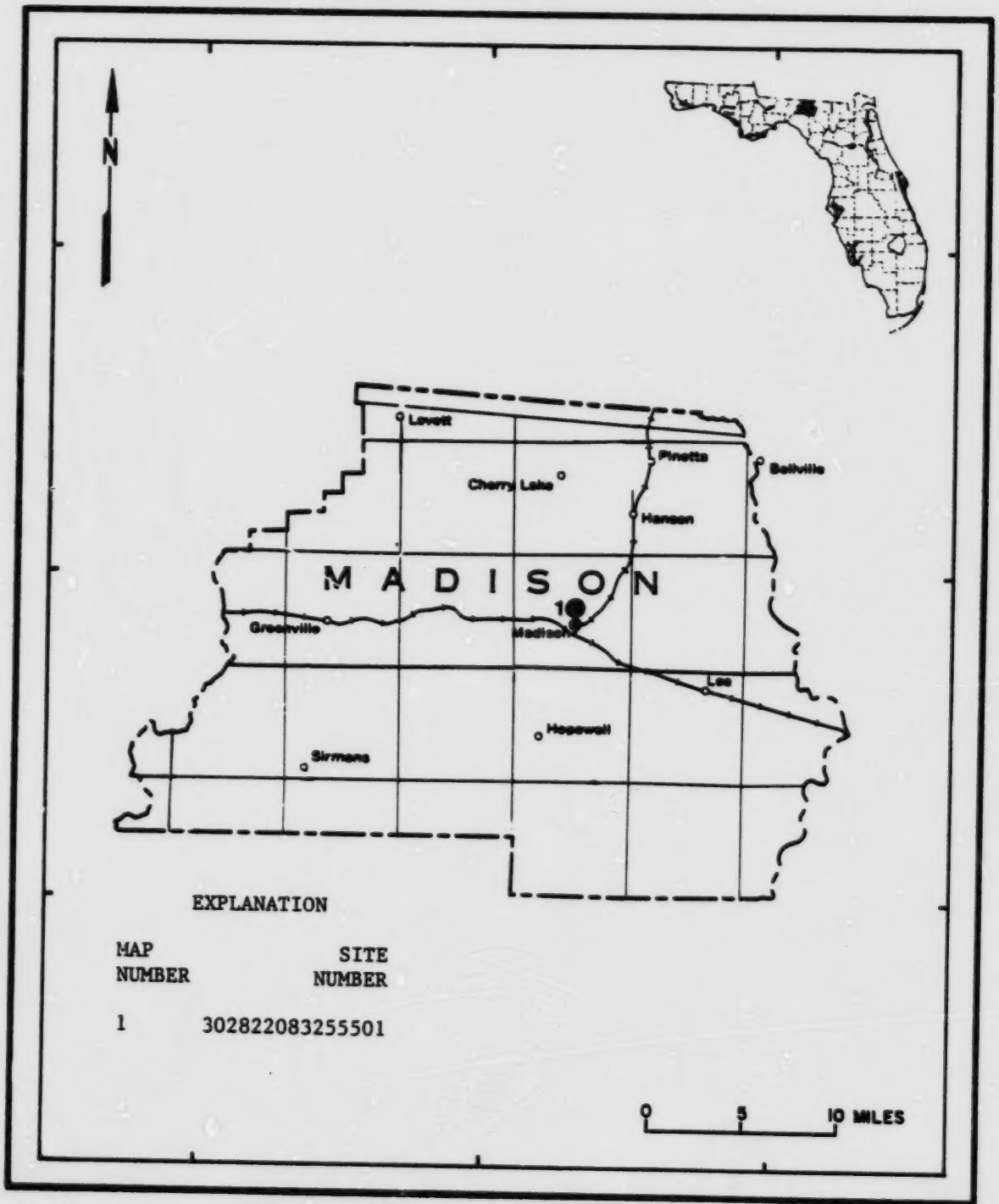

Figure 39. Location of wells in Madison County

MADISON COUNTY

WELL NUMBER.--302822083255501. Local number Madison 18. Florida Department of Transportation well at Madison, FL.

LOCATION.--Lat 30°28'22", long 83°25'55", in SW¼SW¼NW¼ sec.21, T.1 N., R.9 E., Hydrologic Unit 03110103, 0.1 mi south of U.S. Highway 90 and 0.9 mi west of intersection of State Highway 53 and U.S. Highway 90 at Madison.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, drainage, artesian well, diameter 4 in., depth 322 ft, cased to 307 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of recorder shelf, 2.5 ft above land-surface datum.

DATUM.--Land surface datum is 100.56 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--April 1952 to July 1954 (bimonthly); July 1954 to December 1964; January 1965 to November 1977 (bimonthly); January 1978 to November 1981 (semiannually); May 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 94.66 ft NGVD, May 10, 1973; lowest, 64.67 ft NGVD, Mar. 27, 1957.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT			APR		
25...	1030	72.76	25...	1050	81.01
DEC			MAY		
06...	1510	74.80	28...	1050	77.72
31...	0850	78.37	JUN		
JAN			23...	0930	76.13
29...	1155	79.58	JUL		
FEB			28...	1255	74.34
24...	1135	85.12	SEP		
MAR			04...	1045	74.42
25...	1130	84.84	26...	0915	74.06

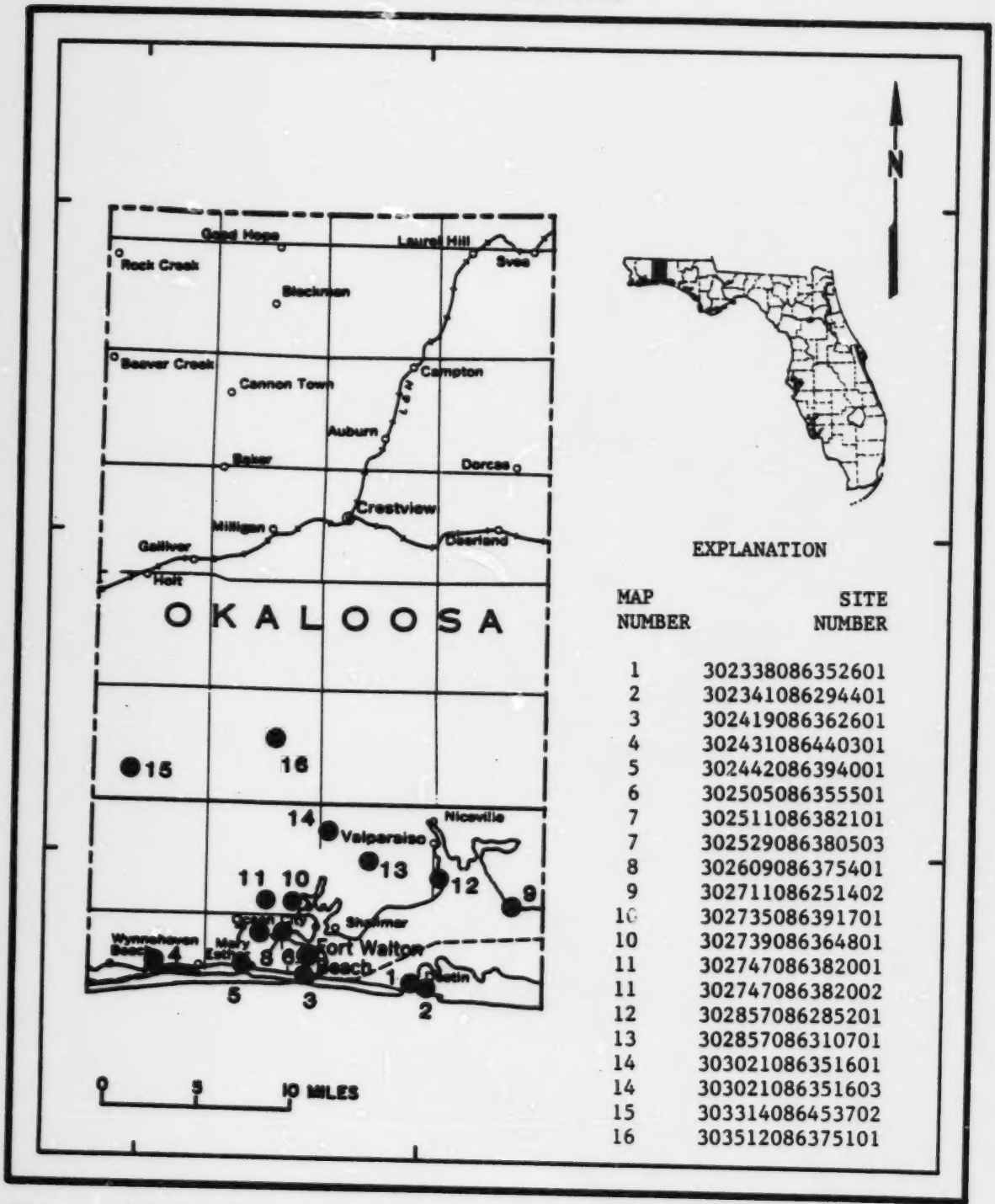

Figure 40. Location of wells in Okaloosa County

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OKALOOSA COUNTY

WELL NUMBER.--302338086352601. State of Florida Wayside Park Well near Ft. Walton Beach, FL.

LOCATION.--Lat 30°23'38", long 86°35'26", in SE¼NE¼SW¼ sec.19, T.2 S., R.23 W., Hydrologic Unit 03140105, at wayside park, 0.5 mi east of U.S. Highway 98 bridge over Choctawhatchee Bay, and 2.0 mi east of Fort Walton Beach, FL.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 5 in., depth 696 ft, cased to 474 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--July 1966, January 1967 (annually); April 1967 to May 1968; October 1968 to August 1970 (bimonthly); July 1974 (annually); March to November 1979 (bimonthly); July 1981 to March 1982 (semiannually); January 1983 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -31.60 ft NGVD, Mar. 4, 1968; lowest measured, -132.30 ft NGVD, Sept. 16, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 29...	0810	-103.33	JUL 15...	0750	-112.95
JAN 22...	0830	-96.42	SEP 09...	0820	-108.32
MAY 07...	1005	-104.89			

WELL NUMBER.--302341086294401. Destin Water Users Inc. Well Number 1 at Destin, FL.

LOCATION.--Lat 30°23'41", long 86°29'44", in sec.*, T.2 S., R.23 W., Hydrologic Unit 03140103, in pumphouse, 0.2 mi north of intersection of State Highway 30B and U.S. Highway 98 at Destin.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 10 in., depth 657 ft, cased to 440 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in pump base, 1.0 above land-surface datum.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--*Land is not sectionized in this area.

PERIOD OF RECORD ELEVATIONS.--March 1975 to current year (bimonthly).

PERIOD OF RECORD WATER QUALITY.--March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -10.22 ft NGVD, Mar. 10, 1975; lowest measured, -64.34 ft NGVD, July 15, 1986.

ELEVATION, CONDUCTANCE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 29...	0845	-50.36	--	--	MAY 07...	1045	-54.38	545	57
JAN 22...	0900	-45.23	535	57	JUL 15...	0945	-64.34	535	57
MAR 19...	0930	-46.09	525	56	SEP 09...	0845	-64.12	520	51

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OKALOOSA COUNTY

WELL NUMBER.--302419086362601. Local number 3. Okaloosa County School Board Well at Fort Walton Beach, FL.

LOCATION.--Lat 30°24'19", long 86°36'26", in SE¼SE¼SW¼ sec.13, T.2 S., R.24 W., Hydrologic Unit 03140105, at Fort Walton Beach Elementary School near corner of intersection of 1st Street, Windham Avenue, and Eglin Parkway at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 6 in, depth 668 ft, cased to 503 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of shelter floor, 2.00 ft above land-surface datum.

DATUM.--Land-surface datum is 16.44 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--August 1936, November 1946 (annually); April 1947 to July 1968 (bimonthly); January 1969 to May 1970 (semiannually); May 1971, July 1974 (annually); March 1975 to November 1977 (bimonthly); April 1978 to September 1980; October 1980 to September 1982 (bimonthly); October 1982 to current year. Records of water levels prior to November 1946 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 62.44 ft NGVD, Aug. 19, 1936; lowest, -113.72 ft NGVD, Aug. 10, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-100.54	-99.37	-97.36	-95.41	-92.83	-91.74	-87.77	---	-107.90	-107.62	-110.29	---
10	-100.67	-98.57	---	-93.92	-92.92	-92.66	-99.76	-106.70	-108.26	-107.85	-112.80	-104.37
15	-101.09	---	-97.05	-91.27	-92.69	-93.33	-101.62	-106.47	-109.64	-109.53	-109.12	-105.89
20	-100.69	-98.39	-97.01	-90.19	-92.03	-94.05	-103.25	-106.73	-109.33	-109.93	-109.61	-105.84
25	-101.38	---	-96.81	-91.12	-91.56	-94.71	-105.36	-107.05	-109.69	-109.36	---	-107.12
EOM	-100.08	---	-96.17	-91.95	-91.31	-96.11	---	-107.28	-108.49	-108.43	---	-107.12
TOTAL	-3127.01	-1481.95	-2618.25	-2484.99	-2586.32	-2900.64	-2944.36	-2242.57	-3260.14	-3374.36	-2199.74	-2228.40
MEAN	-100.87	-98.80	-96.97	-92.04	-92.37	-93.57	-101.53	-106.79	-108.67	-108.85	-109.99	-106.11
MAX	-100.08	-97.80	-96.17	-90.03	-91.26	-91.48	-96.09	-106.31	-107.22	-107.56	-108.56	-104.37
MIN	-101.54	-99.87	-97.82	-95.41	-93.08	-96.11	-106.37	-108.03	-111.02	-110.69	-112.80	-107.45

WTR YR 1986 TOTAL -31448.73 MEAN -101.12 MAX -90.03 JAN 19 MIN -112.80 AUG 10

WELL NUMBER.--302431086440301. Bill Collier Well near Mary Esther, FL. (Formerly published as Richard Hall Well near Mary Esther.)

LOCATION.--Lat 30°24'31", long 86°44'03", in SW¼SE¼SE¼ sec.15, T.2 S., R.25 W., Hydrologic Unit 03140105, 0.2 mi south of U.S. 98 and 3.5 miles west of Mary Esther.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, domestic, artesian well, diameter 6 in., depth 820 ft, casing length unknown.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of 4 in. casing, 1.56 ft above land-surface datum.

DATUM.--Elevation of land-surface is 9 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--February 1968 (annually); July 1978 to September 1982 (bimonthly); October 1982 to current year. (Well discontinued in May 1986, due to casing collapse.)

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 15.00 ft NGVD Feb. 29, 1968; lowest, -73.07 ft NGVD, May 27, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-60.35	-60.65	-58.32	-57.81	-57.10	-55.20	-59.35	-65.27				
10	-60.90	-60.01	-58.48	-57.58	-56.59	-55.02	-60.55	-64.48				
15	-62.39	-59.73	-58.66	-57.55	-56.68	-55.02	-61.27	-64.25				
20	-61.33	-59.34	-58.54	-57.14	-55.87	-55.76	-62.15	-63.52				
25	-62.05	-58.87	-58.32	-56.92	-55.56	-56.13	-63.31	-65.03				
EOM	-60.60	-58.24	-58.13	-57.60	-55.54	-57.26	-65.09	---				
TOTAL	-1894.49	-1787.27	-1810.46	-1781.70	-1580.62	-1725.90	-1843.72	-1680.39				
MEAN	-61.11	-59.58	-58.40	-57.47	-56.45	-55.67	-61.46	-64.63				
MAX	-60.30	-58.24	-57.77	-56.76	-55.00	-54.91	-57.81	-63.38				
MIN	-62.39	-60.68	-58.81	-58.01	-57.66	-57.26	-65.09	-65.68				

WTR YR 1986 TOTAL -14104.55 MEAN -59.26 MAX -54.91 MAR 14 MIN -65.68 MAY 11

OKALOOSA COUNTY

WELL NUMBER.--302442086394001. Town of Mary Esther Well Number 2 at Mary Esther, FL.

LOCATION.--Lat 30°24'42", long 86°39'40", in NE¼NW¼SW¼ sec.16, T.2 S., R.24 W., Hydrologic Unit 30140105, at end of street, 0.3 mi east of water tower, 0.8 mi north of U.S. Highway 98 at Mary Esther.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter unknown, depth 764 ft, cased to 595 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in pump base, 1.5 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD ELEVATIONS.--February 1968, July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -36.44 ft NGVD, Mar. 10, 1975; lowest measured, -102.36 ft NGVD, July 16, 1986.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 05...	0955	-95.48	540	55	MAY 07...	0940	-94.07	555	--	57
JAN 23...	0825	-90.89	545	58	JUL 16...	1045	-102.36	545	--	57
MAR 18...	1720	-88.43	535	56	SEP 10...	1035	-98.48	525	--	55

WELL NUMBER.--302505086355501. City Well Number 5 at Fort Walton Beach, Fl.

LOCATION.--Lat 30°25'05", long 86°35'55", in NE¼NE¼NE¼ sec.13, T.2 S., R.24 W., Hydrologic Unit 03140102, in pumphouse, near intersection of Hughes Street and Carol Street at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 24 in., depth 803 ft, cased to 510 ft.

DATUM.--Elevation of land-surface datum is 8 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water quality records prior to October 1984 are in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1975 (annually); June 1976 (annually); July 1979 (annually); May 1984 to current year (semiannually).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 05...	1030	605	75	MAY 08...	0805	560	57

OKALOOSA COUNTY

WELL NUMBER.--302511086382101. City Well Number 3 at Fort Walton Beach, FL.

LOCATION.--Lat 30°25'11", long 86°38'21", in SE¼SE¼SW¼ sec.10, T.2 S., R.24 W., Hydrologic Unit 03140102, in pumphouse, southwest corner of intersection of Holmes Street and Wright Avenue at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 16 in., depth 735 ft, cased to 548 ft.

DATUM.--Land-surface datum is 38.19 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Water quality records prior to October 1984 are in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1975 (annually); June 1978 (annually); July 1979 (annually); May 1984 to current year (semiannually).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 05...	1015	525	51	MAY 08...	0840	540	52

WELL NUMBER.--302529086380503. City of Fort Walton Beach Cemetary Well at Fort Walton Beach, FL.

LOCATION.--Lat 30°25'29", long 86°38'05", in NE¼NE¼SE¼ sec.10, T.1 S., R.24 W., Hydrologic Unit 03140102, at Memorial Cemetary in Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 6 in. (0-253 ft), 4 in. (253-1015 ft), depth 1149 ft, cased to 1015 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.45 ft above land-surface datum.

DATUM.--Land-surface datum is 34.86 ft National Geodetic Vertical Datum of 1929 (levels by Northwest Florida Water Management District).

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--December 1980 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.80 ft NGVD, Mar. 18, 1981; lowest, -14.17 ft NGVD, Sept. 30, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	-8.65	-8.98	-9.00	---	-8.28	-8.00	-7.89	-9.23	---	-11.82	---	-13.56
10	-8.78	---	---	---	-8.11	-7.81	-8.04	-9.37	---	---	---	-13.70
15	-8.75	---	-9.13	---	-8.32	-7.62	-8.25	-9.64	---	-12.31	---	-13.79
20	-8.81	---	-9.04	---	-8.05	-7.73	-8.41	-9.99	-11.11	---	-13.25	-13.88
25	-8.78	---	---	-8.40	-8.06	-8.05	-8.82	---	-11.30	---	-13.44	-13.93
EOM	-8.05	---	---	-8.72	-7.93	-7.85	-8.99	---	-11.53	-12.51	-13.59	-14.10
TOTAL	-268.94	-79.37	-126.59	-77.17	-229.99	-244.19	-249.23	-209.54	-146.72	-167.95	-225.51	-413.85
MEAN	-8.68	-8.82	-9.04	-8.57	-8.21	-7.88	-8.31	-9.52	-11.29	-12.00	-13.27	-13.80
MAX	-8.05	-8.17	-8.99	-8.40	-7.78	-7.46	-7.75	-9.01	-11.00	-11.57	-12.57	-13.55
MIN	-8.88	-9.17	-9.13	-8.72	-8.74	-8.17	-8.99	-10.09	-11.53	-12.51	-13.61	-14.10

WTR YR 1986 TOTAL -2439.05 MEAN -9.83 Ma[illegible] -7.46 MAR 14 MIN -14.10 SEP 30

OKALOOSA COUNTY

WELL NUMBER.--302609086375401. Okaloosa County School Board Well at Wright, FL.

LOCATION.--Lat 30°26'09", long 86°37'54", in SE¼SE¼SE¼ sec.3, T.2 S., R.24 W., Hydrologic Unit 03140105, at Wright Elementary School at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 to 4 in, depth 640 ft, cased to 473 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plywood floor, 1.10 ft above land-surface datum. June 24, 1975 to April 29, 1976, water-level recorder at same site and datum.

DATUM.--Land-surface datum is 20.82 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1975 to April 1976; April 1976 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, -34.30 ft NGVD, Mar. 5, 1976; lowest measured, -90.47 ft NGVD, September 10, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
05...	1140	-78.94	08...	1050	-86.86
JAN			JUL		
23...	0940	-75.82	16...	1210	-90.46
MAR			SEP		
18...	1430	-75.27	10...	1345	-90.47

WELL NUMBER.--302711086251402. Local Number 24. U.S. Air Force Well near Villa Tasso, FL.

LOCATION.--Lat 30°27'11", long 86°25'14", SE¼SE¼NW¼ sec.35, T.1 S., R.22 W., Hydrologic Unit 03140102, at White Point Housing area behind Bldg. T-1628 near Villa Tasso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 4 in., depth 425 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of steel plate, 0.50 ft below land-surface datum.

DATUM.--Elevation of land-surface datum is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD:--
ELEVATIONS: September 1977 to current year (bimonthly).
WATER QUALITY: October 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -3.02 ft NGVD, Mar. 9, 1978; lowest measured, -45.70 ft NGVD, July 14, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level of 25 ft NGVD reported by driller, May 17, 1957.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	CHLO-RIDE, DIS-SOLVE (MG/L AS CL
NOV					MAY				
04...	1655	-34.73	620	110	07...	1810	-36.58	605	120
JAN					JUL				
21...	1605	-28.74	640	120	14...	1615	-45.70	570	94
MAR									
15...	1550	-28.69	--	--					

OKALOOSA COUNTY

WELL NUMBER.--302735086371701. City Well Number 10 at Fort Walton Beach, FL.

LOCATION.--Lat 30°27'35", long 86°37'17", in NE¼NE¼NW¼ sec.35, T.1 S., R.24 W., Hydrologic Unit 03140102, at City of Fort Walton Beach Golf Course southwest corner of intersection of State Highway 189 and Mooney Road at Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public supply, artesian well, diameter 16 in., depth 800 ft, cased to 487 ft.

DATUM.--Elevation of land-surface datum is 47 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Water quality records prior to October 1984 are in the files of the U. S. Geological Survey.

PERIOD OF RECORD.--Water Quality: May 1975 (annually); June 1978 (annually); May 1981 to current year (bimonthly).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
JAN				JUL			
23...	1040	370	23	16...	1240	335	23
MAR				SEP			
18...	1425	365	22	10...	1520	365	23
MAY							
08...	1240	380	23				

WELL NUMBER.--302739086364801. City Well Number 6 at Fort Walton Beach, FL.

LOCATION.--Lat 30°27'39", long 86°36'48", in SE¼NE¼NE¼ sec.35, T.1 S., R.24 W., Hydrologic Unit 03140102, near 18th green of Fort Walton Beach golf course, 0.2 mi south of State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 24 in, depth 750 ft, cased to 500 ft.

DATUM.--Land-surface datum is 36.04 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD WATER QUALITY.--1977 (semiannually); May 1978 to current year (bimonthly).

CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV				MAY			
05...	1330	325	17	08...	1235	330	20
JAN				JUL			
23...	1030	335	20	16...	1230	320	19
MAR				SEP			
18...	1415	320	19	10...	1515	310	19

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OKALOOSA COUNTY

WELL NUMBER.--302747086382001. USGS Observation Well at Wright, FL.

LOCATION.--Lat 30°27'47", long 86°38'20", in NE¼NE¼NW¼ sec.34, T.1 S., R.24 W., Hydrologic Unit 03140102, 200 ft west of North Beal Street, 0.4 mi north of intersection of North Beal Street and State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 10 in., depth 858 ft, cased to 503 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.12 ft above land-surface datum.

DATUM.--Land-surface datum is 57.67 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1966 to February 1981; March 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 12.60 ft NGVD, Feb. 5, 1967 estimated; lowest measured, -78.76 ft NGVD, Sept. 10, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 05...	1300	-68.36	MAY 08...	1215	-74.36
JAN 23...	1010	-65.55	SEP 10...	1500	-78.76
MAR 18...	1415	-63.35			

WELL NUMBER.--302747086382002. USGS Observation Well at Wright, FL.

LOCATION.--Lat 30°27'47", long 86°38'20", in NE¼NE¼NW¼ sec.34, T.1 S., R.24 W., Hydrologic Unit 03140102, 200 ft west of North Beal Street, 0.4 mi north of intersection of North Beal Street and State Highway 189, and about 3 mi north of Fort Walton Beach.

AQUIFER.--Northwestern Floridan sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, test, observation well, diameter 2 in, depth 38 ft, cased to 23 ft, screened from 23 to 38 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.50 above land-surface datum.

DATUM.--Elevation of land-surface datum is 58 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--July 1977 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.12 ft NGVD, Mar. 9, 1978; lowest measured, 52.01 ft NGVD, September 10, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 05...	1255	55.17	MAY 08...	1210	53.00
JAN 23...	1005	54.36	SEP 10...	1455	52.01
MAR 18...	1410	55.57			

OKALOOSA COUNTY

WELL NUMBER.--302857086285201. U.S. Air Force Postil Point Well, near Niceville, FL.

LOCATION.--Lat 30°28'57", long 86°28'52", in NW¼NE¼SE¼ sec.19, T.1 S., R.22 W., Hydrologic Unit 03140102, at Postil Point on Eglin Air Force Base, behind Eglin Kindergarten School, and about 3 mi south of Niceville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 6 in., depth 508 ft, cased to 300 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of reducer, 2.30 ft above land-surface datum.

DATUM.--Land-surface datum is 7.54 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1947 to July 1964 (bimonthly); January 1965 to May 1970 (semiannually); January 1971, July 1974 (annually); January 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.74 ft NGVD, Sept. 3, 1947; lowest measured -76.33 ft NGVD, July 16, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 05...	1445	-53.68	MAY 08...	1325	-67.04
JAN 23...	1225	-49.96	JUL 16...	1350	-76.33
MAR 18...	0940	-47.91	SEP 10...	1615	-67.93

WELL NUMBER.--302857086310701. U.S. Air Force Hardstand Tower Well near Valpariso, FL.

LOCATION.--Lat 30°28'57", long 86°31'07", in NW¼NW¼SE¼ sec.23, T.1 S., R.23 W., Hydrologic Unit 03140102, on Eglin Air Force Base about 1.5 mi south of Valpariso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 8 in, depth 702 ft, cased to 404 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of hole in steel plate, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 66 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--March 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -22.0 ft NGVD, Mar. 7, 1978; lowest measured, -78.55 ft NGVD, July 16, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level reported as 20.5 ft NGVD by driller in January 1958.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 05...	1445	-54.36	MAY 08...	1420	-73.02
JAN 23...	1305	-51.14	JUL 16...	1425	-78.55
MAR 18...	1100	-50.60	SEP 10...	1640	-71.98

OKALOOSA COUNTY

WELL NUMBER.--303021086351601. U.S. Air Force Field 4 Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°30'21", long 86°35'16", in NE¼NE¼NW¼ sec.18, T.1 S., R.23 W., Hydrologic Unit 03140102, at auxiliary field 4, about 6 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 10 in., depth 591 ft, cased to 442 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in. hole in pump base, 1.0 ft above land-surface datum.

DATUM.--Land-surface datum is 89.33 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--Jan. 1948 to Sept. 1967 (bimonthly); March 1978 (annually); Jan. 1979 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 65.33 ft NGVD, Apr. 14, 1948; lowest measured, -40.85 ft NGVD, Sept. 10, 1986.

ELEVATION, IN FEET NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			JUL		
30...	1520	-32.37	16...	1610	-38.20
MAR			SEP		
18...	1350	-26.95	10...	1630	-40.85
MAY					
08...	1520	-35.40			

WELL NUMBER.--303021086351603. U.S. Air Force Field 4 Deep Well near Fort Walton Beach, FL.

LOCATION.--Lat. 30°30'21", long 86°35'16", in NE¼NE¼NW¼ sec.18, T.1 S., R.23 W., Hydrologic Unit 03140102, at auxillary field 4, about 6 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Teritary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 in, depth 1380 ft, cased to 938 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of plywood shelf, 0.3 ft above land-surface datum. Prior to July 1981, water-level recorder at same site and datum.

DATUM.--Elevation of land-surface datum is 88 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--December 1980 to July 1981; July 1981 to current year (bimonthly). Records of water levels prior to July 1981 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, -7.20 ft NGVD, Mar. 19, 1981; lowest measured -38.93 ft September 10, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
30...	1510	-31.41	08...	1510	-33.78
JAN			JUL		
23...	1340	-28.82	16...	1625	-38.25
MAR			SEP		
18...	1340	-27.09	10...	1720	-38.93

OKALOOSA COUNTY

WELL NUMBER.--303314086453702. U.S. Air Force Metts Tower Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°33'14", long 86°45'37", in SW¼SW¼SE¼ sec.28, T.1 N., R.25 W., Hydrologic Unit 03140103, at Metts Tower on Eglin Air Force Base about 10 mi northwest of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 796 ft, cased to 600 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 0.5 ft below land-surface datum.

DATUM.--Elevation of land-surface datum is 195 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--April 1978 (annually); Nov. 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 36.75 ft NGVD, Mar. 11, 1979; lowest measured, 14.94 ft NGVD, July 17, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 06...	0820	18.16	MAY 08...	1700	17.71
JAN 23...	1510	18.54	JUL 17...	0755	14.94
MAR 18...	1250	19.28	SEP 11...	0815	15.93

WELL NUMBER.--303512086375101. Local Number 29. U.S. Air Force Observation Well near Fort Walton Beach, FL.

LOCATION.--Lat 30°35'12", long 86°37'51", in NW¼NE¼SE¼ sec.15, T.1 N., R.24 W., Hydrologic Unit 03140102, at U.S.A.F. Field 5, 6.4 mi southwest of State Highway 85, 8.3 mi north of State Highway 189, and 14 mi north of Fort Walton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, public-supply, artesian well, diameter 10 in, depth 710 ft, cased to 524 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 1.06 ft above land-surface datum.

DATUM.--Land-surface datum is 178.03 ft National Geodetic Vertical Datum of 1929.

REMARKS.--Extremes may have been exceeded during periods of missing record.

PERIOD OF RECORD.--October 1947 to May 1966 (bimonthly); May 1966 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 78.23 ft NGVD, Oct. 28, 1947; lowest, -2.56 ft NGVD, Sept. 28, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	3.82	3.63	4.10	4.62	4.80	4.66	5.17	3.85	2.03	.67	---	---
10	3.63	3.52	4.10	4.81	4.93	4.54	5.14	3.39	---	---	---	---
15	3.64	3.63	4.10	4.60	4.66	4.82	4.92	3.12	---	---	---	-1.57
20	3.57	3.81	4.22	4.85	4.78	4.90	4.77	2.94	---	.10	-0.94	-1.65
25	3.34	3.86	4.45	4.89	4.66	4.85	4.36	---	---	-0.07	-1.19	-1.64
EOM	4.12	4.12	4.65	4.54	4.73	5.14	4.17	---	---	-0.16	-1.34	-1.80
TOTAL	113.01	112.37	132.17	145.43	132.47	148.46	145.22	69.53	8.79	4.34	-16.32	-37.99
MEAN	3.65	3.75	4.26	4.69	4.73	4.79	4.84	3.48	1.76	.20	-0.96	-1.58
MAX	4.12	4.18	4.65	4.91	4.93	5.14	5.33	4.08	2.03	.87	-0.19	-1.33
MIN	3.34	3.46	3.97	4.46	4.50	4.51	4.17	2.94	1.25	-0.16	-1.36	-1.80

WTR YR 1986 TOTAL 957.48 MEAN 3.19 MAX 5.33 APR 8 MIN -1.80 SEP 29 AND OTHERS

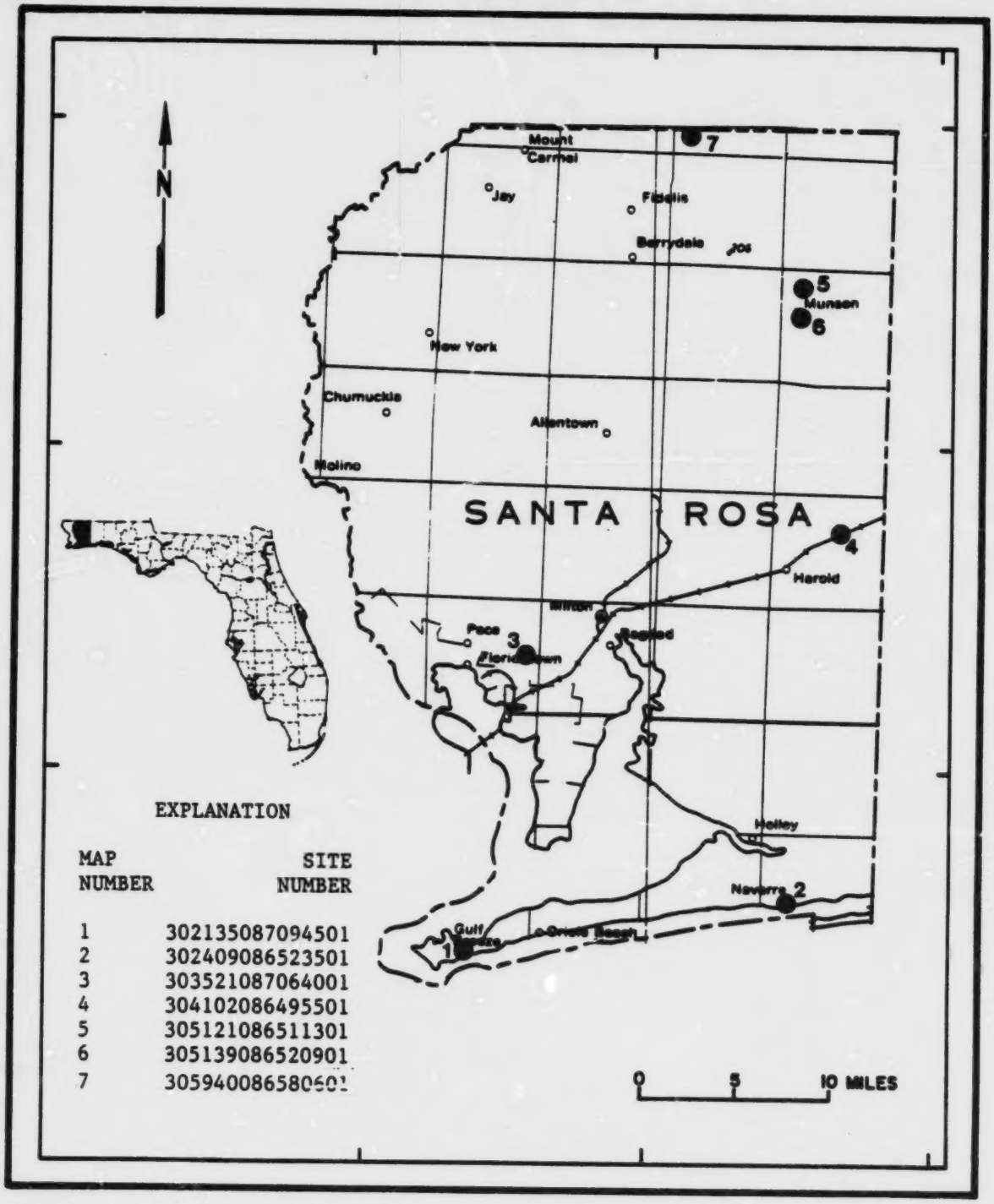

Figure 41. Location of wells in Santa Rosa County

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SANTA ROSA COUNTY

WELL NUMBER.--302135087094501. Local number 102. USGS Observation Well at Gulf Breeze, FL.

LOCATION.--Lat 30°21'35", long 87°09'45", in NE¼SW¼SE¼ sec.4, T.3 S., R.29 W., Hydrologic Unit 03140105, south of McClure Drive, 0.25 mi north of U.S. Highway 98 and McClure Drive intersection at Gulf Breeze.

AQUIFER.--Sand aquifer of Pleistocene series, Geologic Unit 112 SAND.

WELL CHARACTERISTICS.--Drilled, observation, water-table well, diameter 6 in., depth 41 ft, cased to 31 ft, screened from 31 to 41 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of cap, 1.09 ft below land-surface datum.

DATUM.--Land-surface datum is 11.56 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1950 to May 1951 (weekly); May 1951 to September 1964; May 1965 to May 1971 (annually); January 1972 to November 1975 (semiannually); December 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.14 ft NGVD, Nov. 15, 1975; lowest, 0.98 ft NGVD, Jan. 17, 1955.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
MAR			JUL		
10...	1700	7.20	16...	1630	4.57
JUN			SEP		
01...	1630	5.73	10...	1645	4.80

WELL NUMBER.--302409086523501. Louis Woodham Cement Plant Well at Navarre, FL.

LOCATION.--Lat 30°24'09", long 86°52'35", in NE¼NE¼SW¼ sec.20, T.2 S., R.26 W., Hydrologic Unit 03140105, 200 ft west of intersection of State Highway 87 and U.S. Highway 98, and 450 ft north of U.S. Highway 98 at Navarre.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, industrial, artesian well, diameter 3 in, depth 940 ft, cased to 800 ft.

INSTRUMENTATION.--Tape measured. Reference point: Top of hole in casing, 0.38 ft below land-surface datum. Prior to May 1975, measuring point: Top of reducer coupling at land surface datum.

DATUM.--Elevation of land-surface datum is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--March 1961, July 1966 (annually); November 1966 to May 1968 (bimonthly); May 1969 to May 1974 (semiannually); January 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 60.0 ft NGVD, Mar. 1, 1961; lowest measured, -30.31 ft NGVD, July 16, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV			JUL		
05...	0810	-20.64	16...	0755	-30.31
JAN			SEP		
22...	1620	-19.88	09...	0750	-29.51
MAY					
07...	0755	-26.29			

SANTA ROSA COUNTY

WELL NUMBER.--303521087064001. Local number 035-706-1. USGS Observation Well near Milton, FL.

LOCATION.--Lat 30°35'21", long 87°06'40", in SW¼SE¼SW¼ sec.13, T.1 N., R.29 W., Hydrologic Unit 03140104, 0.9 mi south of U.S. Highway 90, 2.25 mi west of intersection of U.S. Highway 90 and State Highway 191A, and 4.9 mi southwest of Milton.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 211 ft, cased to 206 ft, screened from 206 to 211 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 3.00 ft above land-surface datum.

DATUM.--Land-surface datum is 127.28 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1959 to October 1962; November 1962 to February 1967 (monthly); July 1967 to May 1968 (bimonthly); January 1969 to May 1971 (semiannually); January 1972 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 45.31 ft NGVD, Aug. 26, 27, 1961; lowest measured, 28.44 ft NGVD, July 9, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
22...	1620	33.78	14...	1245	34.73
JAN			JUL		
07...	0935	33.61	15...	1230	34.86
MAR			SEP		
03...	1650	34.10	12...	0850	34.76

WELL NUMBER.--304102086495501. Local number 041-649-1. USGS Observation Well at Floridale, FL.

LOCATION.--Lat 30°41'02", long 86°49'55", in NE¼NW¼NE¼ sec.15, T.2 N., R.26 W., Hydrologic Unit 03140103, 22 ft north of U.S. Highway 90, 0.3 mi east of town of Floridale, and 3.3 mi east of Harold.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in, depth 98 ft, cased to 93 ft, screened from 93 to 98 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of coupling, 3.05 ft above land-surface datum. Prior to September 20, 1962 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 155.76 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--August 1959 to September 1962; September 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 105.04 ft NGVD, Jan. 17, 1976; lowest measured, 82.46 ft NGVD, May 6, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
25...	1250	89.93	16...	1400	92.59
JAN			JUL		
08...	0845	89.81	17...	1415	92.37
MAR			SEP		
11...	0940	90.70	18...	1010	91.53

SANTA ROSA COUNTY

WELL NUMBER.--305121086511301. Local Number Jay 3. U.S. Geological Survey Observation Well near Munson, FL.

LOCATION.--Lat 30°51'21", long 86°51'13", in SW¼NW¼NW¼ sec.16, T.4 N., R.16 W., Hydrologic Unit 03140104, about 50 ft north of State Highway 4, 1.15 mi east of intersection of State Highways 191 and 4 at Munson.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Teritary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 4 in., depth 46 ft, cased to 41 ft, screened from 41 to 46 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.6 ft above land-surface datum.

DATUM.--Land-surface datum is 99.88 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1978 (annually); November 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 97.34 ft NGVD, July 26, 1978; lowest measured 94.04 ft Nov. 18, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 01...	1210	94.50	APR 01...	1440	95.17
DEC 10...	1325	94.63	AUG 05...	1355	94.54
FEB 04...	1440	94.86			

WELL NUMBER.--305139086520901. Local Number Jay 4. Florida Forest Service Well at Munson, FL.

LOCATION.--Lat 30°51'39", long 86°52'09", in SW¼SW¼SW¼ sec.8, T.4 N., R.26 W., Hydrologic Unit 03140104, 0.24 mi north of State Road 4 at Munson Nursery at Munson.

AQUIFER.--Northwestern Florida sand-and-gravel aquifer of the Tertiary System, Geologic Unit 120 NFSG.

WELL CHARACTERISTICS.--Drilled, irrigation well, diameter 18 to 8 in., depth 445 ft, cased to 385 ft, screened from 385 to 435 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 1 in. nipple in pump base, 2.00 ft above land-surface datum.

DATUM.--Land-surface datum is 215.30 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--July 1978 to September 1981 (bimonthly); January 1982 (annually); November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.90 ft NGVD, Mar. 2, 1984; lowest measured, 52.97 ft NGVD, Jan. 21, 1981.

EXTREMES OUTSIDE PERIOD OF RECORD.--Water level of 103.3 ft NGVD, reported by driller on Apr. 11, 1952.

ELEVATION, IN FEET, NGVD, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
JAN 07...	1550	80.45	JUL 17...	1115	78.00
MAR 11...	0845	80.13	SEP 18...	1230	79.03

SANTA ROSA COUNTY

WELL NUMBER.--305940086580601. Florida Forest Service Observation Well near Jay, FL.

LOCATION.--Lat 30°59'40", long 86°58'06", in NW¼SW¼SW¼ sec.29, T.6 N., R.27 W., Hydrologic Unit 03140104, at Camp Henderson Fire Tower, on clay road 5.4 mi east of State Highway 87, and 11 mi northeast of Jay.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 to 3 in., depth 815 ft, cased to 510 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of cap, 0.80 ft above land-surface datum.

DATUM.--Elevation of land surface datum is 280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--July 1961 (annually); July 1966 to November 1967 (bimonthly); January 1968 to May 1969 (semi-annually); January 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 128.00 ft NGVD, July 14, 1961; lowest measured, 109.72 ft NGVD, July 17, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 25...	0910	110.20	JUL 17...	0945	109.72
JAN 07...	1450	110.45	SEP 18...	1140	109.83
MAY 16...	1050	110.04			

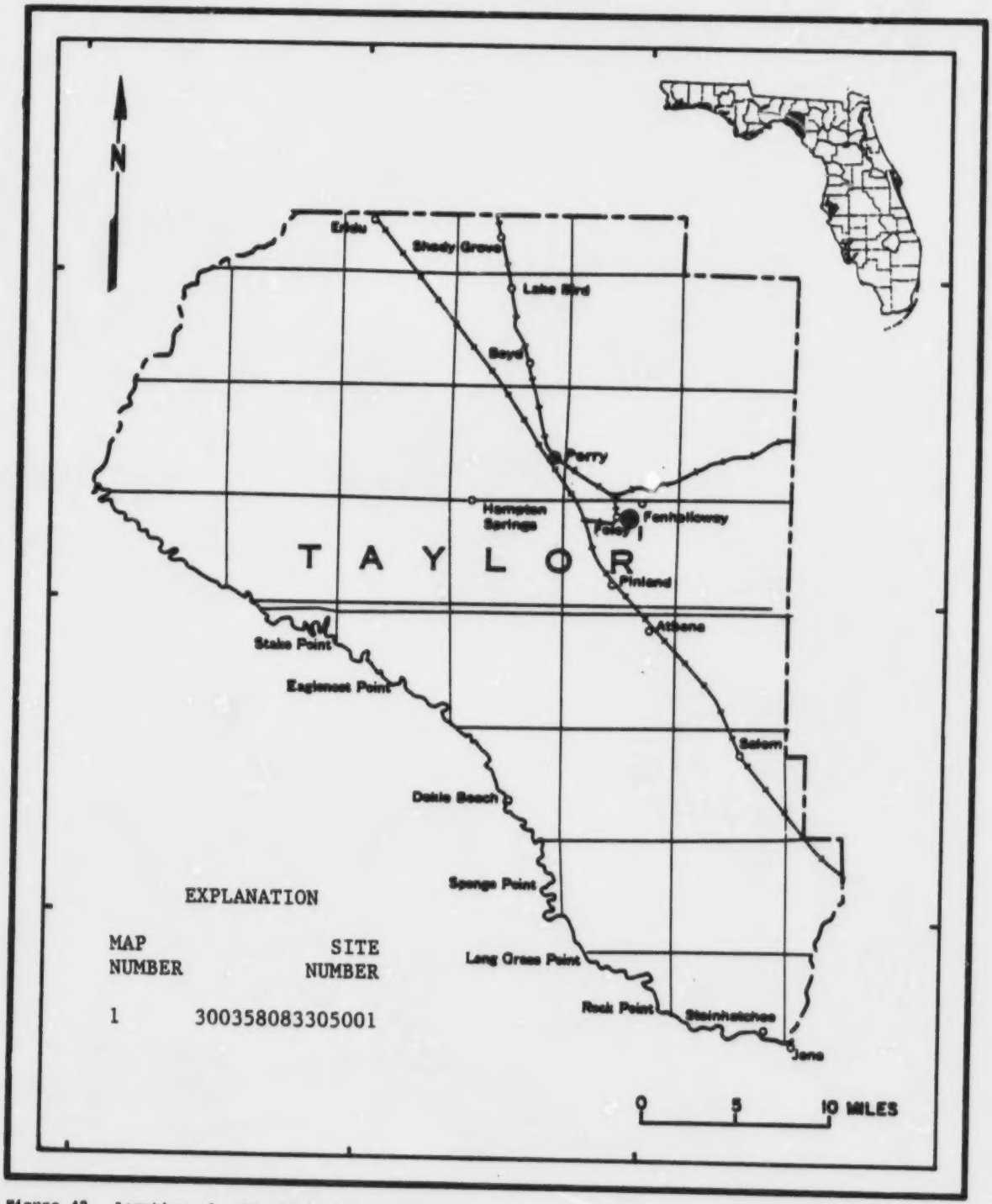

Figure 42. Location of wells in Taylor County

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WELL DESCRIPTIONS AND WATER LEVEL MEASUREMENTS

TAYLOR COUNTY

WELL NUMBER.--300358083305001. Local Number Taylor 35. Buckeye Cellulose Corporation Well near Fenholloway, FL.

LOCATION.--Lat 30°03'58", long 83°30'50", in NE¼SE¼NW¼ sec.10, T.5 S., R.8 E., Hydrologic Unit 03110102, 1.5 mi southwest of Fenholloway and 5.3 mi southeast of Perry.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 17 to 12 in., depth 230 ft, cased to 189 ft.

INSTRUMENTATION.--Water-level recorder. Reference point: Top of recorder shelf, 2.40 ft above land-surface datum.

DATUM.--Land-surface datum is 54.69 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1946 to current year.

REMARKS.--Water levels affected by pumping of nearby wells.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 55.38 ft NGVD, Apr. 2, 1948; lowest, 12.19 ft NGVD, May 15, 1974.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	30.40	40.87	28.95	29.11	30.26	31.72	31.03	28.87	27.22	28.48	26.29	28.49
10	30.10	30.23	28.75	29.85	31.08	31.78	30.62	28.33	26.71	28.54	26.05	28.47
15	29.71	29.84	28.80	30.34	31.68	31.68	30.17	27.96	26.64	27.81	26.79	28.53
20	29.36	29.47	29.02	30.58	31.81	31.72	29.91	27.91	27.90	27.36	27.40	28.34
25	29.07	29.20	28.96	30.33	31.80	38.30	29.60	27.76	28.31	26.96	27.63	28.70
EOM	39.78	28.92	28.78	30.16	31.74	31.34	29.30	27.43	28.49	26.62	28.14	29.73
TOTAL	952.03	956.22	895.82	930.62	874.88	988.39	908.40	872.54	825.04	859.70	835.09	927.98
MEAN	30.71	31.87	28.90	30.02	31.25	31.88	30.28	28.15	27.50	27.73	26.94	30.93
MAX	40.23	41.09	29.05	30.91	31.90	38.30	31.85	29.23	28.53	28.63	28.14	39.94
MIN	28.98	28.92	28.66	28.76	30.11	31.34	29.30	27.43	26.57	26.62	25.83	28.25

WTR YR 1986 TOTAL 10826.61 MEAN 29.66 MAX 41.09 NOV 2 MIN 25.83 AUG 12

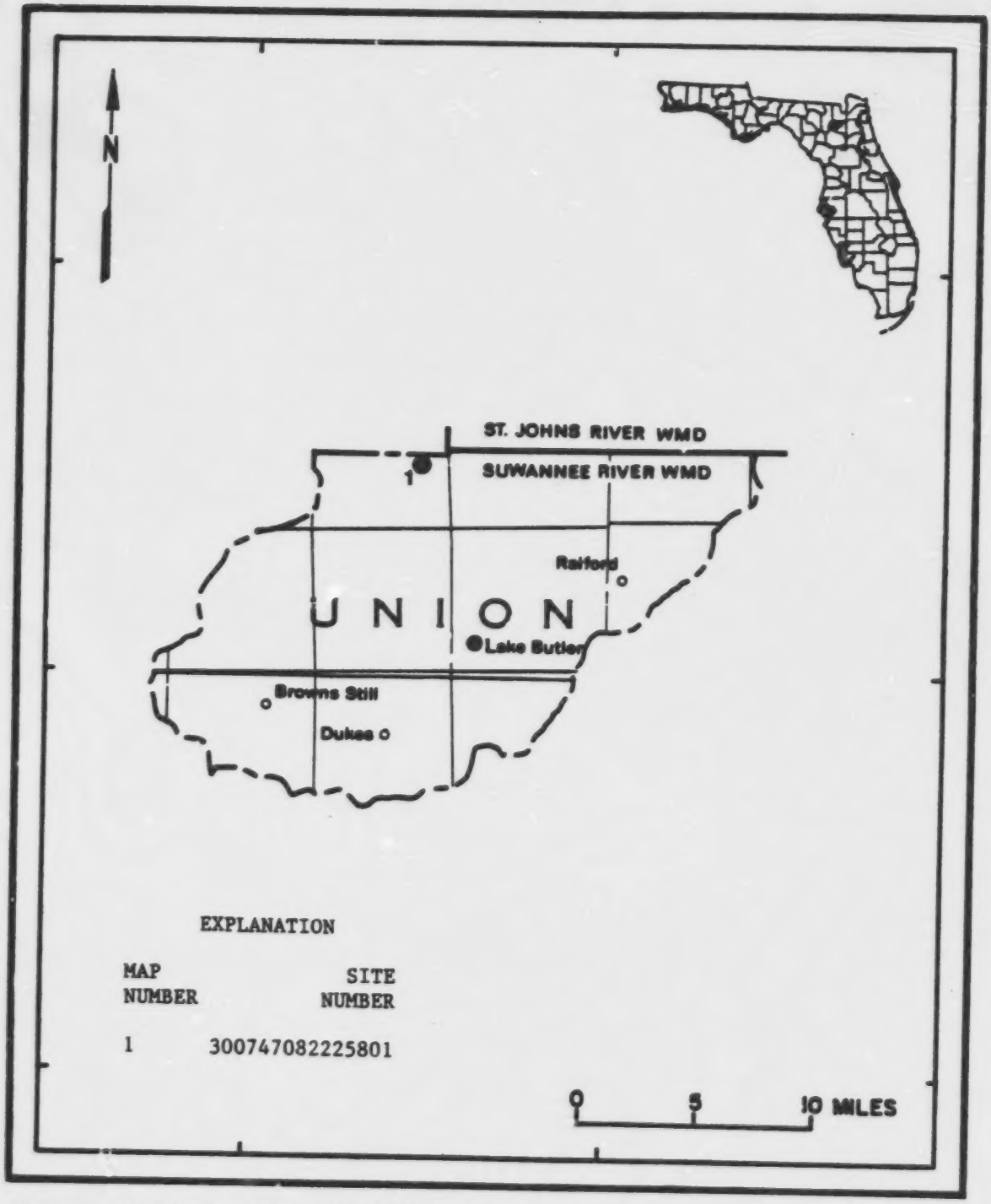

Figure 43. Location of wells in Union County

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UNION COUNTY

WELL NUMBER.--300747082225801. USGS Observation Well near Lake Butler, FL.

LOCATION.--Lat 30°07'47", long 82°22'58", in SE¼NW¼SE¼ sec.23, T.4 S., R.19 E., Hydrologic Unit 03110206, about 40 ft east of State Highway 231, 0.8 mi south of Union-Baker county line, and 7.6 mi north of Lake Butler.

AQUIFER.--Florida aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 8 in., depth 724 ft, cased to 694 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of recorder shelf, 3.07 ft above land-surface datum.

DATUM.--Land-surface datum is 152.75 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--November 1958 to September 1984; Oct. 1984 to Sept. 1985 (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 66.76 ft NGVD, Mar. 29, 30, 1965; lowest, 53.30 ft NGVD, Aug. 10, 1981.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
28...	1215	57.06	13...	1040	58.23
DEC			27...	0920	57.57
09...	1025	57.23	JUN		
24...	0940	57.87	19...	0830	56.69
JAN			JUL		
29...	1030	58.94	31...	1245	55.75
FEB			SEP		
24...	0950	60.26	04...	1030	55.53
MAR			15...	1030	55.54
26...	0950	60.56	23...	0930	55.60
APR					
29...	1250	59.15			

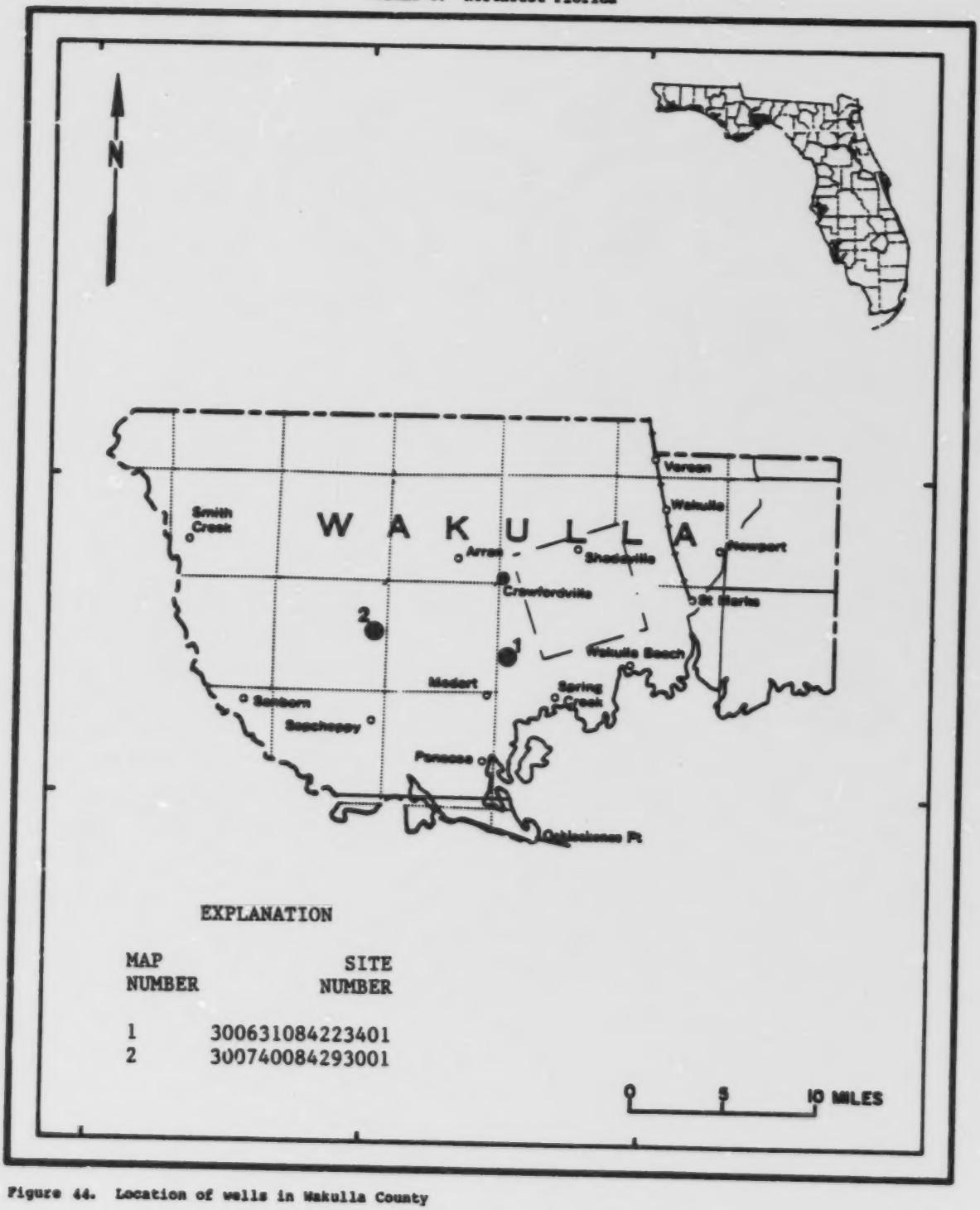

Figure 44. Location of wells in Wakulla County

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WAKULLA COUNTY

WELL NUMBER.--300631084223401. Wakulla High Test Well. Wakulla County School Board Well near Medart, FL.

LOCATION.--Lat 30°06'31", long 84°22'34", in Land Grant Number 91 of Hartsfield Survey, Hydrologic Unit 03120001, .25 mi east of intersection of U.S. 98 and SR 61, 5 mi south of Crawfordville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, test, artesian well, diameter 4 in., depth 221 ft, cased 70 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in. casing, 0.8 ft above land-surface datum.

DATUM.--Land-surface datum is 36.15 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--December 1974 to September 1981 (bimonthly); October 1981 to September 1982 (monthly); November 1982 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 7.52 ft NGVD, Aug. 7, 8, 1982; lowest measured, 3.53 ft NGVD, Feb. 7, 1978.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
08...	1740	5.90	20...	1650	5.99
DEC			JUL		
04...	1445	5.46	25...	1115	5.30
FEB			SEP		
19...	1640	6.95	15...	1330	5.72
APR					
09...	1730	4.51			

WELL NUMBER.--300740084293001. USGS Observation Well near Crawfordville, FL.

LOCATION.--Lat 30°07'40", long 84°29'30", in NW¼NE¼NW¼ sec.24, T.4 S., R.3 W., Hydrologic Unit 03120003, 400 ft east of Sopchoppy River, 6.6 mi southwest of intersection of Forest Road 365 and State Highway 315, and 7.8 mi west of Crawfordville.

AQUIFER.--Hawthorn Limestone aquifer of the Miocene System, Geologic Unit 122 HTRNN.

WELL CHARACTERISTICS.--Drilled, bench mark, artesian well, diameter 6 in depth 127 ft, cased to 121 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 46.91 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--January 1967 to current year. Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 36.91 ft NGVD, July 31, 1975; lowest, 24.42 ft NGVD, Sept. 14, 1966.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	32.38	34.09	33.69	33.68	32.99	33.34	32.51	31.28	30.44	30.90	30.82	33.13
10	32.12	33.43	33.27	33.81	35.22	33.08	32.29	31.10	30.33	30.99	31.03	32.87
15	31.91	32.98	35.10	33.82	35.15	33.37	32.07	30.91	30.54	30.86	32.24	32.70
20	31.76	32.71	34.31	33.54	34.37	33.43	31.87	30.92	31.09	30.62	32.67	32.45
25	32.02	33.97	33.68	33.19	33.93	33.20	31.69	30.84	31.06	30.47	32.90	32.15
EOM	33.27	33.66	33.34	32.97	33.67	32.89	31.51	30.61	31.01	30.82	33.09	31.86
TOTAL	996.34	1005.77	1050.55	1039.00	956.75	1030.44	962.57	960.81	921.20	954.95	990.93	978.47
MEAN	32.14	33.53	33.89	33.52	34.17	33.24	32.09	30.99	30.71	30.80	31.97	32.62
MAX	33.27	34.19	35.10	33.92	35.60	33.56	32.79	31.46	31.11	31.03	33.09	33.15
MIN	31.76	32.71	33.21	32.97	32.87	32.89	31.51	30.61	30.33	30.46	30.75	31.86

WTR YR 1986 TOTAL 11847.78 MEAN 32.46 MAX 35.60 FEB 12 MIN 30.33 JUN 10 AND OTHERS

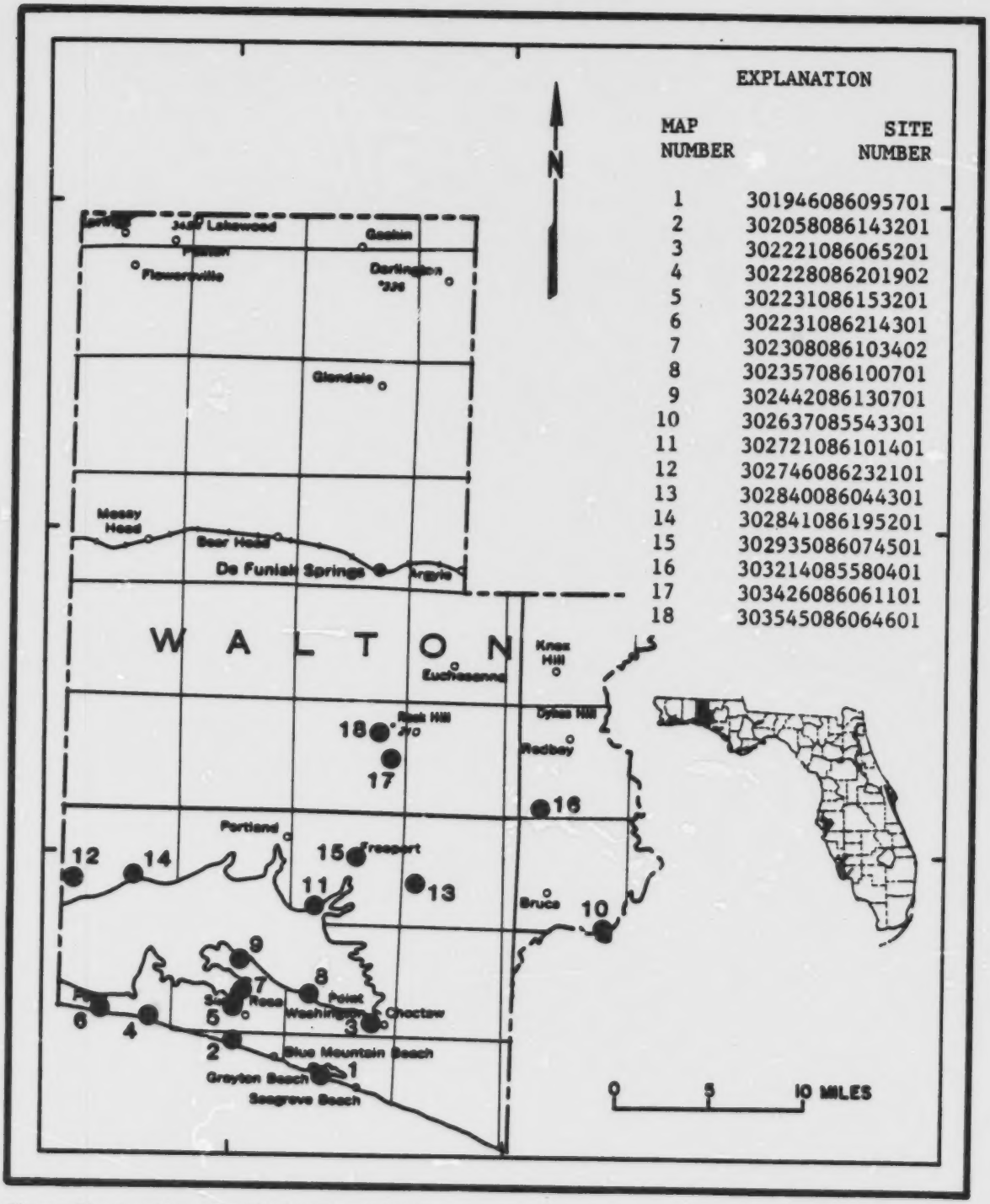

Figure 45. Location of wells in Walton County

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WALTON COUNTY

WELL NUMBER.--301946086095701. Van R. Butler Well at Grayton Beach, FL.

LOCATION.--Lat 30°19'46", long 86°09'57", in NW¼NE¼NE¼ sec.17, T.3 S., R.19 W., Hydrologic Unit 03140102, about 300 ft north of Gulf of Mexico, 2.2 mi south of U.S. Highway 98, at Grayton Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in., depth 466 ft, cased to 424 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 1.2 ft above land-surface datum.

DATUM.--Land-surface datum is 7.46 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: April 1961 to current year (bimonthly).
WATER QUALITY: 1961-1967 (semiannually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 22.16 ft NGVD, May 8, 1964; lowest measured, 3.92 ft NGVD, Oct. 13, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT						MAY					
29...	1030	12.41	1090	25.0	240	07...	1410	12.16	1100	25.0	250
JAN						JUL					
22...	1100	12.43	1080	21.0	240	15...	1130	10.23	1080	25.5	240
MAR						SEP					
19...	1140	12.68	1070	24.0	240	09...	1055	--	1060	25.0	230

WELL NUMBER.--302058086143201. Eric Allen Well at Dune Allen Beach, FL.

LOCATION.--Lat 30°20'58", long 86°14'32", in SW¼NE¼SW¼ sec.3, T.3 S., R.20 W., Hydrologic Unit 03140102, south of State Highway 30A near Oyster Lake, 0.8 mi west of State Highway 393 and 1.9 mi southwest of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum.

DATUM.--Elevation of land-surface datum is 6 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD ELEVATIONS.--June 1968 to August 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--May 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 2.36 ft NGVD, Oct. 29, 1985; lowest measured, -13.72 ft NGVD, July 16, 1980.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT					MAY				
29...	1010	2.36	285	22	07...	1350	--	295	17
JAN					JUL				
22...	1030	0.15	285	21	15...	1105	--	280	14
MAR					SEP				
19...	1100	-1.63	280	17	09...	1025	-4.27	280	16

WALTON COUNTY

WELL NUMBER.--302221086065201. C. H. McGee, Jr. Well at Point Washington, FL.

LOCATION.--Lat 30°22'21", long 86°06'52", in SW¼NE¼SE¼ sec.26, T.2 S., R.19 W., Hydrologic Unit 03140102, 1.4 mi northeast of intersection of State Highway 395 and U.S. Highway 98 at Point Washington.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 3 in, depth 365 ft, cased to 65 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of reducer, 1.5 ft above land-surface datum.

DATUM.--Land-surface datum is 2.30 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: March 1970 to March 1984 (bimonthly).
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semiannually); January 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 17.9 ft NGVD, Nov. 21, 1975 and Jan. 27, 1976; lowest measured, 5.24 ft NGVD, Sept. 12, 1972.

CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
JAN				
22...	1220	920	22.0	220
MAR				
19...	1250	925	23.0	220
SEP				
09...	1120	900	23.0	210

WELL NUMBER.--302228086201902. Holiday Campground Well near Miramar Beach, FL.

LOCATION.--Lat 30°22'28", long 86°20'19", in NW¼NW¼NE¼ sec.34, T.2 S., R.21 W., Hydrologic Unit 03140102, 0.2 mi south of U.S. Highway 98, 3.7 mi east of Okaloosa-Walton County line, 3.5 mi east of Miramar Beach.

AQUIFER.--Floridan aquifer of the Teritary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in, depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 4 in. casing at land-surface datum.

DATUM.--Elevation of land-surface datum is 24 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: July 1978 (annually); November 1978 to current year (bimonthly).
WATER QUALITY: 1970 (two samples); 1971 (three samples); November 1971 to current year (bi- monthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 1.71 ft NGVD, Mar. 16, 1979; lowest measured -33.24 ft NGVD, July 15, 1986.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT				
29...	0940	-23.42	325	19
JAN				
22...	1000	-18.49	310	15
MAR				
19...	1000	-18.35	310	15
MAY				
07...	1135	-22.68	330	16
JUL				
15...	1610	-33.24	330	17
SEP				
09...	1000	-32.23	315	16

WALTON COUNTY

WELL NUMBER.--302231086153201. J. R. Holley Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°22'32", long 86°15'32", in SW¼SW¼SE¼ sec.28, T.2 S., R.20 W., Hydrologic Unit 03140102, behind residence 150 ft north of U.S. 98, 1.75 mi west of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, unused, artesian well, diameter 3 in., depth 545 ft cased to 265 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of 2 in. nipple, 0.85 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 12 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: May 1971 (annually); July 1978 to current year (bimonthly).
WATER QUALITY: July 1978 to current year.

REMARKS.--Water quality data collected at adjacent well number 302231086153203.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.60 ft NGVD, Mar. 31, 1983; lowest measured, 6.79 ft NGVD, July 15, 1986.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT					MAY				
29...	1425	8.88	2180	560	07...	1200	8.45	2200	580
JAN					JUL				
22...	1430	10.05	2180	600	15...	1520	6.79	2150	570
MAR					SEP				
19...	1030	10.30	2150	600	09...	1205	7.68	2150	590

WELL NUMBER.--302231086214301. M. T. Fontarn Well near Miramar Beach, FL.

LOCATION.--Lat 30°22'31", long 86°21'43", in NE¼NW¼NW¼ sec.33, T.2 S., R.21 W., Hydrologic Unit 03140102, at residence behind Sea and Indian Museum, 2.1 mi east of Okaloosa-Walton county line and 7.2 mi west of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in, depth 420 ft, cased to 350 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum.

DATUM.--Elevation of land-surface datum is 23 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD ELEVATIONS.--June 1968 to September 1970 (bimonthly); July 1974 (annually); March 1975 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

PERIOD OF RECORD WATER QUALITY.--July 1968 to August 1969 (bimonthly); 1970 (two samples); March 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.92 ft NGVD, June 5, 1968; lowest measured, -39.67 ft NGVD, Sept. 9, 1986.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT					MAY				
29...	0930	-21.97	255	9.0	07...	1115	-18.97	285	10
JAN					JUL				
22...	0950	-16.56	270	11	15...	1020	--	275	9.3
MAR					SEP				
19...	0950	-16.07	270	9.6	09...	0920	-39.67	275	9.6

WALTON COUNTY

WELL NUMBER.--302308086103402. Walter Dannelly Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°23'08", long 86°10'34", in SE¼NE¼NW¼ sec.29, T.2 S., R. 19 W., Walton Conty, Hydrologic Unit 03140102, in front of residence 0.4 mi east of U.S. Highway 331, and 3.0 mi northeast of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in, depth and length of casing unknown.

PERIOD OF RECORD.--January 1978 to current year (bimonthly).

CONDUCTANCE AND CHLORIDE DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT				MAY			
29...	1350	2380	650	07...	1530	2300	650
JAN				JUL			
22...	1240	2270	650	15...	1440	2300	650
MAR				SEP			
19...	1330	2250	640	09...	1245	2250	640

WELL NUMBER.--302357086100701. Florida Department of Transportation Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°23'57", long 86°10'07", in SW¼NW¼NE¼ sec.20, T.2 S., R.19 W., Hydrologic Unit 03140102, near south end of U.S. Highway 331 bridge over Choctawhatchee Bay, 2.4 mi north of U.S. Highway 98, and 3.8 mi northeast of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 337 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of coupling 1.10 ft above land-surface datum.

DATUM--Land-surface datum is 5.00 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: April 1961 to July 1962, May 1968 to May 1969, April 1970 to current year (bimonthly).
WATER QUALITY: July 1961 (annually); January 1962 to May 1967 (semiannually); January 1968 to July 1969 (bimonthly); June 1970 (annually); 1971 (three samples); November 1971 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.80 ft NGVD, Feb. 28, 1962; lowest measured, 0.86 ft NGVD, Oct. 11, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
OCT						MAY					
29...	1340	10.12	2050	24.0	570	07...	1540	10.11	2100	21.0	590
JAN						JUL					
22...	1250	10.29	2050	23.0	580	15...	1420	8.01	2050	22.0	560
MAR						SEP					
19...	1340	10.99	2050	20.0	590	09...	1255	7.94	1950	23.5	610

WALTON COUNTY

WELL NUMBER.--302442086130701. S. L. Matthews Well near Santa Rosa Beach, FL.

LOCATION.--Lat 30°24'42", long 86°13'07", in NE¼SW¼SW¼ sec.14, T.2 S., R.20 W., Hydrologic Unit 03140102, in front of residence 0.9 mi northeast of SR 393 about 3 mi north of Santa Rosa Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 8 in, depth 330 ft, cased to 165 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of 3 in casing, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 5 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD
ELEVATIONS: September 1969 (annually); July 1978 to current year (bimonthly).
WATER QUALITY: September 1969 (annually); July 1978 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 10.53 ft NGVD, Mar. 21, 1979; lowest measured, 1.74 ft NGVD, Sept. 9, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT 29...	1410	4.69	MAY 07...	1305	4.50
JAN 22...	1415	4.98	JUL 15...	1505	1.79
MAR 19...	1315	5.87	SEP 09...	1150	1.74

WELL NUMBER.--302637085543301. William Wilson Well near Bruce, FL.

LOCATION.--Lat 30°26'37", long 85°54'33", in NE¼SE¼SE¼ sec.35, T.1 N., R.17 W., Hydrologic Unit 03140203, at Cowford Fish Camp, 0.7 mi south of State Highway 20, and 3.8 mi southeast of Bruce.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 3 in., depth 196 ft, cased to 60 ft.

INSTRUMENTATION.--Pressure gage. Measuring point: Top of reducer, 0.80 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 16 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: June 1968 to current year (bimonthly).
WATER QUALITY: June 1968 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 26.20 ft NGVD, Nov. 21, 1975; lowest measured, 16.75 ft NGVD, Oct. 12, 1972.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
OCT 04...	1110	22.95	118	21.0	3.5	MAY 13...	1400	22.85	122	21.5	4.2
NOV 15...	0830	22.75	119	21.5	3.5	JUL 22...	1450	21.55	110	22.0	2.4
FEB 04...	1445	23.65	118	21.0	3.4	SEP 09...	1100	22.50	108	22.5	2.3
APR 03...	1840	23.80	130	21.5	4.1						

WALTON COUNTY

WELL NUMBER.--302721086101401. Selma Madara Well near Freeport, FL.

LOCATION.--Lat 30°27'21", long 86°10'14", in SW¼NE¼NW¼ sec.32, T.1 S., R.19 W., Hydrologic Unit 03140102, near the west bank at mouth of Bear Creek, and 3.5 mi southwest of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, industrial, artesian well, diameter 12 in depth 250 ft, cased to 100 ft.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 2.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 4 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: July 1968 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.
WATER QUALITY.--August 1968 to May 1969 (bimonthly); 1970 (two samples); 1971 (three samples); 1972 (semiannual); January 1973 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.0 ft NGVD, Mar. 22, 1976; lowest measured, -7.73 ft NGVD, Oct. 11, 1972.

EXTREMES OUTSIDE PERIOD OF RECORD.--A water level of 27 ft NGVD, was reported by Frank Westendick in 1931, month unknown.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	TEMPERATURE (DEG C)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 04...	1545	13.10	580	20.0	110
JAN 28...	1445	13.50	590	19.0	110
MAR 17...	1545	14.00	585	20.0	110
MAY 07...	1700	13.20	610	20.5	110
JUL 15...	1340	11.40	590	22.0	110
SEP 09...	1640	11.40	550	23.0	110

WELL NUMBER.--302746086232101. Ray Wright Well at Villa Tasso, FL.

LOCATION.--Lat 30°27'46", long 86°23'21", in SE¼SW¼NW¼ sec.30, T.1 S., R.21 W., Hydrologic Unit 03140102, 0.5 mi east of Okaloosa-Walton County line at Villa Tasso Kennels at Villa Tasso.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 440 ft, cased to 220 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 19 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: March 1978 to July 1979 (semiannually); November 1980 to current year (bimonthly).
WATER QUALITY: July 1979 (annually); 1981 (semiannually); November 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 5.75 ft NGVD, Mar. 29, 1978; lowest measured, -24.10 ft NGVD, July 14, 1986.

ELEVATION, CONDUCTANCE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 04...	1635	-15.34	240	3.6
JAN 21...	1535	-11.37	235	3.4
MAR 19...	1530	-10.88	240	4.2
MAY 07...	1750	-17.70	240	4.0
JUL 14...	1550	-24.10	235	2.5
SEP 09...	1730	-21.60	230	3.0

WALTON COUNTY

WELL NUMBER.--302840086044301. Thomas Miller Well near Freeport, FL.

LOCATION.--Lat 30°28'40", long 86°04'43", in NE¼NE¼NW¼ sec.32, T.1 N., R.18 W., Hydrologic Unit 03140102, at private residence, 2.6 mi east of intersection of State Highway 20 and U.S. Highway 331, 4.0 mi east of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL DESCRIPTION.--Drilled, domestic, artesian well, diameter 4 in, depth 200 ft, length of casing unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 1.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: 1978 (two measurements); 1979 (three measurements); November 1980 to September 1981 (bimonthly).
WATER QUALITY: 1978, 1979 (annually); May 1981 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 19.71 ft NGVD, Mar. 15, 1978; lowest measured, 6.62 ft NGVD, July 11, 1979.

ELEVATION, CONDUCTANCE, AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)	SPECIFIC CONDUCTANCE (US/CM)	CHLORIDE, DISSOLVED (MG/L AS CL)
NOV 04...	1325	16.47	215	3.2	MAY 06...	1225	16.77	220	3.2
JAN 21...	1400	17.05	210	3.2	JUL 14...	1405	15.25	215	3.3
MAR 17...	1500	17.40	210	4.0	SEP 08...	1530	15.00	210	3.3

WELL NUMBER.--302841086195201. R. E. Lalonde Well at Choctaw Beach, FL.

LOCATION.--Lat 30°28'41", long 86°19'52", in SW¼NE¼SE¼ sec.22, T.1 S., R.21 W., Hydrologic Unit 03140102, 75 ft north of State Highway 20, 200 ft north of wayside park and 1.2 mi east of Choctaw Beach.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 4 in., depth 316 ft, cased to 132 ft.

INSTRUMENTATION.--Pressure gage. Measuring point: Top of casing, 2.0 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 2 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--
ELEVATIONS: December 1969, July 1974 (annually); March 1975 to current year (bimonthly).
QUALITY WATER: May 1975 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 14.4 ft NGVD, Mar. 4, 1976; lowest measured, -5.55 ft NGVD, July 14 and September 9, 1986.

ELEVATION, IN FEET, NGVD, WATER YEAR, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
NOV 04...	1620	-0.81	MAY 07...	1725	-1.25
JAN 21...	1510	0.48	JUL 14...	1540	-5.55
MAR 19...	1520	1.64	SEP 09...	1720	-5.55

WALTON COUNTY

WELL NUMBER.--302935086074501. Local Number 17. City of Freeport Well at Freeport, FL.

LOCATION.--Lat 30°29'13", long 86°08'12", in SW¼SE¼SW¼ sec.15, T.1 S., R.19 W., Hydrologic Unit 03140102, 81 ft east-northeast of Fourmile Creek and 381 ft north-northwest of confluence of Fourmile and Lafayette Creek, and 0.4 mi southeast of City Hall at Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian well, diameter 8 in, depth 187 ft, casing length unknown.

INSTRUMENTATION.--Pressure gage or tape measured. Measuring point: Top of tee, 3.50 ft above land-surface datum.

DATUM.--Land-surface datum is 2.70 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--
ELEVATIONS: September 1947 to October 1963 (bimonthly); June 1969 (annually); September 1974 to current year (bimonthly).
WATER QUALITY: November 1974 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 37.7 ft NGVD, Sept. 3, 1947; lowest measured, -1.60 ft NGVD, June 18, 1969.

ELEVATION, CONDUCTANCE, TEMPERATURE AND CHLORIDE DATA, OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	SPE-CIFIC CON-DUC-TANCE (US/CM)	TEMPER-ATURE (DEG C)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV 04...	1500	17.00	175	21.0	3.1	MAY 07...	1630	17.00	180	21.0	2.1
JAN 21...	1420	17.40	175	19.0	1.9	JUL 14...	1430	15.50	175	22.0	1.6
MAR 17...	1530	18.00	170	20.5	2.9	SEP 09...	1610	15.20	170	22.0	2.9

WELL NUMBER.--303214085580401. Local Number FAF No. 72. First American Farms Well near Bruce, FL.

LOCATION.--Lat 30°32'14", long 85°58'04", in SW¼SE¼NW¼ sec.32, T.2 N., R.17 W., Hydrologic Unit 03140203, about 4 mi southwest of Redbay and about 4.5 mi north of Bruce.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in., depth 506 ft, cased to 218 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.50 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 123 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--September 1968 to November 1970; November 1970 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORDS.--Highest water level measured, 31.01 ft NGVD, Nov. 21, 1975; lowest, -51.20 ft NGVD, July 13, 1970.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV 04...	1305	27.18	MAY 06...	1125	28.50
JAN 21...	1145	28.85	JUL 14...	1335	26.83
MAR 17...	1320	29.30	SEP 08...	1120	26.62

WALTON COUNTY

WELL NUMBER.--303426086061101. Local Number FAF No. 2. First American Farms Well near Freeport, FL.

LOCATION.--Lat 30°34'26", long 86°,06'11", in NE¼NW¼NW¼ sec.24, T.1 N., R.19 W., Hydrologic Unit 03140102, 0.2 mi east of U.S. Highway 331, 1 mi north of clay road, and 5.5 mi north of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, irrigation, artesian well, diameter 10 in, depth 440 ft, cased to 172 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing at land-surface datum. Prior to October 7, 1970 water-level recorder at same site and datum.

DATUM.--Land-surface datum is 153.46 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1968 to October 1970; November 1970 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 42.33 ft NGVD, Nov. 20, 1975; lowest measured, -45.25 ft NGVD, Oct. 11, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
04...	1425	38.39	06...	1040	39.31
JAN			JUL		
21...	1220	39.14	14...	1300	37.94
MAR			SEP		
17...	1350	39.84	09...	1515	37.54

WELL NUMBER.--303545086064601. U.S. Air Force Rock Hill Tower Well at Rock Hill, FL.

LOCATION.--Lat 30°35'45", long 86°06'46", in NE¼NW¼SE¼ sec.11, T. 1 N., R.19 W., Hydrologic Unit 03140102, Rock Hill Tower at Rock Hill, 0.1 mi north of intersection of U.S. Highway 331 and State Highway 282, and 7 mi north of Freeport.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, domestic, artesian well, diameter 4 in., depth 440 ft, cased 248 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 0.60 ft above land-surface datum.

DATUM.--Land-surface datum is 210.50 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--June 1968 to current year (bimonthly).

REMARKS.--Water levels affected by nearby irrigation pumpage.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 77.60 ft NGVD, Mar. 30, 1983; lowest measured, 8.22 ft NGVD, June 26, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
NOV			MAY		
04...	1415	47.45	06...	1025	48.16
JAN			JUL		
21...	1235	48.18	14...	1335	47.03
MAR			SEP		
17...	1400	48.96	09...	1525	46.63

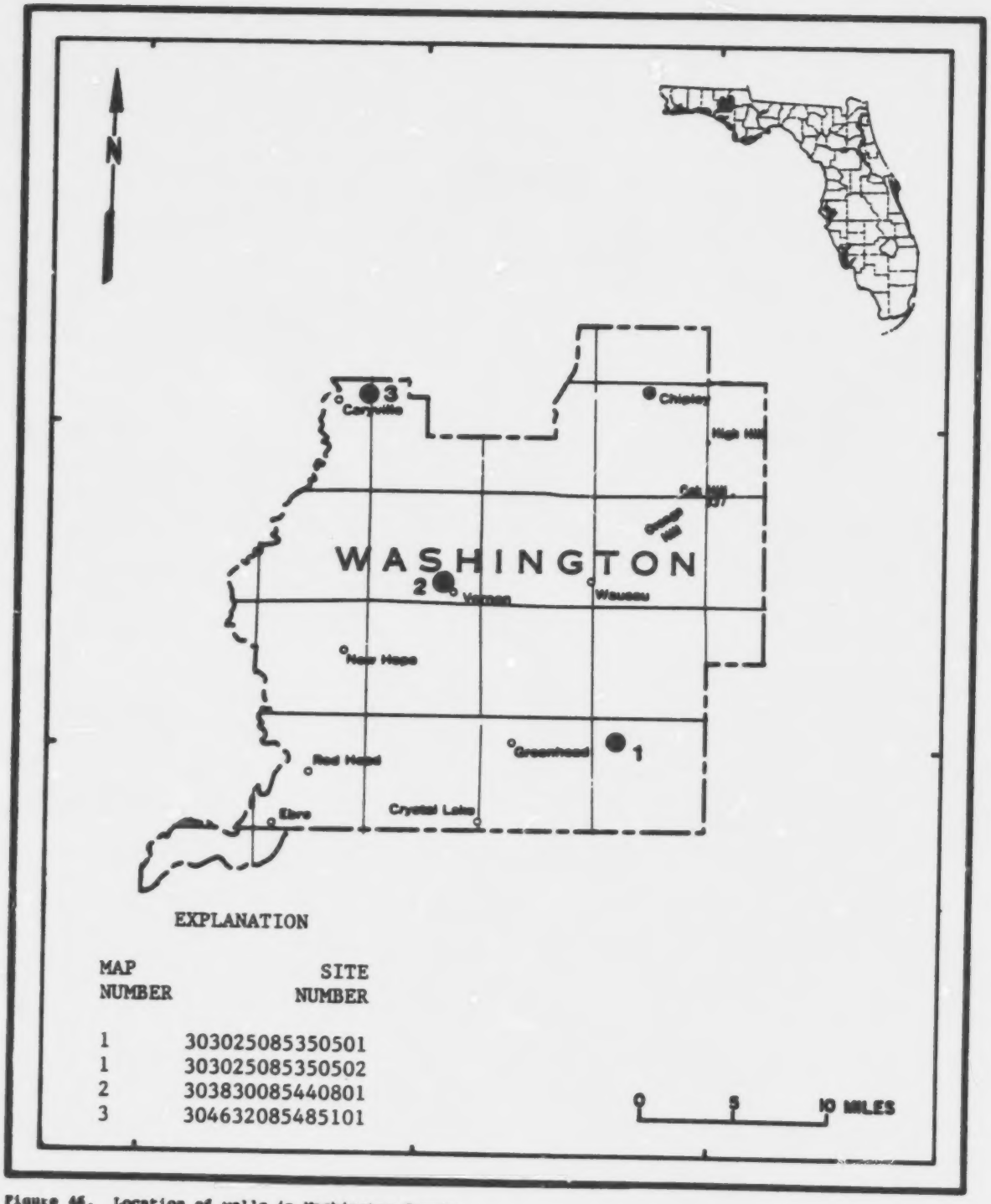

Figure 46. Location of wells in Washington County

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WASHINGTON COUNTY

WELL NUMBER--303025085350501. Local Number 422A. U.S. Geological Survey Observation Well near Wausau, FL.

LOCATION.--Lat 30°30'25", long 85°35'05", in SE¼NW¼NW¼ sec.7, T.1 N., R.13 W., Hydrologic Unit 03140101, 0.6 mi east of road to Deadening Cemetery, 4.2 mi east of State Highway 77, and 8.6 mi south of Wausau.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, observation, artesian well, diameter 4 in., depth 150 ft, cased to 110 ft.

INSTRUMENTATION.--Water-level recorder. Measuring point: Top of recorder shelf, 2.90 ft above land-surface datum.

DATUM.--Land-surface datum is 66.11 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--1962 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 65.75 ft NGVD, Oct. 1, 2, 1979; lowest, 48.19 ft NGVD, Feb. 13, 14, 1969.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.92	58.51	59.47	60.34	60.32	---	---	---	59.64	59.02	59.13	59.90
10	57.73	58 41	59.35	60.48	61.13	61.66	---	---	59.44	58.81	59.15	59.73
15	57.54	58.25	60.01	60.42	---	61.90	---	60.37	59.31	58.73	59.44	59.54
20	57.43	58.13	59.97	60.39	---	61.91	---	60.32	59.45	58.55	59.43	59.38
25	57.32	59.36	59.86	60.32	---	61.91	---	60.05	59.27	58.84	59.28	59.26
EOM	58.36	59.41	60.11	60.26	---	61.87	---	59.82	59.16	59.14	59.16	59.11
TOTAL	1786.54	1760.02	1852.58	1870.50	727.50	1607.61	185.57	1142.87	1782.52	1825.04	1836.93	1785.32
MEAN	57.63	58.67	59.76	60.34	60.63	61.83	61.86	60.15	59.42	58.87	59.26	59.51
MAX	58.36	59.41	60.11	60.48	61.13	61.93	61.86	60.42	59.80	59.16	59.46	59.90
MIN	57.27	58.13	59.35	60.17	60.20	61.63	61.85	59.82	59.16	58.52	59.11	59.11

WTR YR 1986 TOTAL 18163.10 MEAN 59.55 MAX 61.93 MAR 14 MIN 57.27 OCT 27

WELL NUMBER.--303025085350502. Local number 030-535-422B. U.S. Geological Survey Observation Well near Wausau, FL.

LOCATION.--Lat 30°30'25", long 85°35'05", in SE¼NW¼NW¼ sec.7, T.1 N., R.13 W., Hydrologic Unit 03140101, 0.6 mi east of road to Deadening Cemetery, 4.2 mi east of State Highway 77, and 8.6 mi south of Wausau.

AQUIFER.--Nonartesian sand aquifer of the Tertiary System, Geologic Unit 120 NRSD.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 2 in, depth 26 ft, cased to 23 ft, screened from 23 to 26 ft.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 2.80 ft above land-surface datum.

DATUM.--Land-surface datum is 67.48 ft National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1962 to current year (bimonthly). Records of water levels prior to January 1974 are available in files of the Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 66.21 ft NGVD, Feb. 20, 1964; lowest measured, 58.55 ft NGVD, Nov. 7, 1972.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEVATION ABOVE NGVD (FEET)	DATE	TIME	ELEVATION ABOVE NGVD (FEET)
OCT 08...	1145	62.73	MAY 13...	0715	62.04
NOV 15...	0730	63.47	SEP 10...	0835	64.16
MAR 06...	1200	64.84			

WASHINGTON COUNTY

WELL NUMBER.--303830085440801. Wayne Weber Well near Vernon, Fl.

LOCATION.--Lat 30°38'30", long 85°44'08", in SW¼NW¼NW¼ sec.27, T.3 N., R.15 W., Hydrologic Unit 03140203, about 60 ft east of dirt farm road, 0.2 mi south of county road 170 and 1.6 mi northwest of Vernon.

AQUIFER.--Florida Aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, unused, artesian, stock well, diameter 4 in., depth and casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of sanitary seal, 0.50 ft above land-surface datum.

DATUM.--Elevation of land-surface datum is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

PERIOD OF RECORD.--January 1983 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured 33.84 ft NGVD, Mar. 29, 1983; lowest measured 26.78 ft, Dec. 10, 1984.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
03...	1425	28.86	13...	0830	29.93
NOV			JUL		
15...	0700	29.94	22...	0810	27.39
FEB			SEP		
05...	0940	32.30	10...	0745	28.43
APR					
03...	1150	32.77			

WELL NUMBER.--304632085485101. Local number 4. Town of Caryville Well at Caryville, FL.

LOCATION.--Lat 30°46'32", long 85°48'51", in NW¼NE¼NW¼ sec.11, T.4 N., R.16 W., Hydrologic Unit 03140203, at lumber mill, 0.1 mi north of U.S. Highway 90 at Caryville.

AQUIFER.--Floridan aquifer of the Tertiary System, Geologic Unit 120 FLRD.

WELL CHARACTERISTICS.--Drilled, public-supply, artesian well, diameter 4 in., depth 785 ft, casing length unknown.

INSTRUMENTATION.--Tape measured. Measuring point: Top of casing, 1.00 ft above land-surface datum.

DATUM.--Land-surface datum is 62.97 ft above National Geodetic Vertical Datum of 1929.

PERIOD OF RECORD.--September 1946 to current year (bimonthly).

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 56.17 ft NGVD, Mar. 9, 1966; lowest measured, 44.99 ft NGVD, Nov. 23, 1952.

EXTREMES OUTSIDE PERIOD OF RECORD.--A water-level of 62.97 ft NGVD, was reported by driller, Dec. 12, 1935.

ELEVATION, IN FEET, NGVD, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)	DATE	TIME	ELEV-ATION ABOVE NGVD (FEET)
OCT			MAY		
08...	0910	49.79	12...	1835	49.87
NOV			JUL		
14...	1625	50.60	22...	0825	47.36
FEB			SEP		
05...	1030	52.79	09...	1715	49.85
APR					
03...	1200	53.27			

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MISCELLANEOUS WATER LEVEL MEASUREMENTS

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MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEVATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEOLOGIC UNIT
	ALACHUA					
293542082253801	U.S.G.S./HOWELL WELL AT KANAPAHA	05-14-86	48.56	--	77.00	120FLRD
		09-16-86	48.23	--	77.00	
294839082230701	CELLON WELL NR LA CROSSE	05-13-86	47.20	--	164.00	120FLRD
		09-16-86	45.72	--	164.00	
294923082174501	MONTEOCHA	05-13-86	62.06	--	100.00	120FLRD
		09-16-86	65.44	--	100.00	
	BAKER					
301423082261101	B-15	05-12-86	59.52	--	159.00	120FLRD
		09-15-86	55.85	--	159.00	
302251082194901	B-25 ONF #6 FLORIDAN WELL NEAR TAYLOR, FL.	10-29-85	52.30	75.47	128.00	120FLRD
		11-26-85	52.51	75.26	128.00	
		12-31-85	53.35	74.42	128.00	
		01-30-86	54.88	72.89	128.00	
		02-26-86	57.16	70.61	128.00	
		03-26-86	56.68	71.09	128.00	
		04-30-86	54.62	73.15	128.00	
		05-12-86	53.90	73.87	128.00	
		05-28-86	52.97	74.80	128.00	
		06-26-86	51.80	75.97	128.00	
		07-31-86	50.91	76.86	128.00	
		08-29-86	50.67	77.10	128.00	
		09-15-86	50.74	77.03	128.00	
		09-30-86	50.65	77.12	128.00	
	BAY					
300347085345501	LOCAL NO. 003534113	11-15-85	2.37	25.48	28.00	120FLRD
		05-14-86	3.15	24.70	28.00	
301006085413501	WELL BAY 7 AT PANAMA CITY, FLORIDA	11-15-85	-8.22	34.55	26.30	120FLRD
		05-13-86	-9.65	35.98	26.30	
301550085355801	LOCAL NO.015-535-113	11-15-85	9.13	-1.35	7.80	120FLRD
		05-13-86	7.62	0.16	7.80	
	BRADFORD					
295055082130801	GRAHAM USGS WELL NR.WALDO	05-13-86	65.62	--	140.00	120FLRD
		09-15-86	62.96	--	140.00	
295257082045701	SOUTH OF STARKE	05-13-86	85.65	--	174.00	120FLRD
		09-15-86	84.02	--	174.00	
300020082103001	LOCAL NO.000-210-2	05-13-86	60.44	--	138.00	120FLRD
		09-15-86	59.08	--	138.00	
	CALHOUN					
301437085114901	LOCAL NO.014-511-1	11-15-85	38.95	-7.25	31.70	120FLRD
		05-12-86	40.75	-9.05	31.70	
		05-12-86	40.70	-9.00	31.70	
303024085024701	STAFFORD CR WELL N OF BLOUNTSTOWN,FL	11-14-85	60.04	29.96	90.00	120FLRD
		05-12-86	59.18	30.82	90.00	
	DIXIE					
293731083061801	LOCAL NO.15 CROSS CITY	10-24-85	35.72	--	40.20	120FLRD
		12-05-85	35.52	--	40.20	
		12-27-85	35.08	--	40.20	
		01-28-86	35.78	--	40.20	
		02-20-86	36.11	--	40.20	
		03-24-86	36.13	--	40.20	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEVATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEOLOGIC UNIT
	DIXIE					
293731083061801	LOCAL NO.15 CROSS CITY	04-23-86	34.88	--	40.20	
		05-28-86	33.82	--	40.20	
		06-26-86	35.06	--	40.20	
		07-28-86	35.03	--	40.20	
		08-22-86	36.64	--	40.20	
		09-25-86	36.00	--	40.20	
	ESCAMBIA					
302220087205001	USGS TH11 DOG TRACK RD.	10-14-85	--	14.59	22.00	120NFSG
		11-18-85	--	13.93	22.00	
		12-08-85	--	13.74	22.00	
		01-13-86	--	13.57	22.00	
		02-10-86	--	13.50	22.00	
		03-24-86	--	13.52	22.00	
		04-21-86	--	13.95	22.00	
		05-12-86	--	14.80	22.00	
		06-11-86	--	15.40	22.00	
		07-14-86	--	15.86	22.00	
		08-11-86	--	16.56	22.00	
		09-07-86	--	15.59	22.00	
302232087240501	USGS TH108,SE BRONSON FLD	10-14-85	--	18.53	25.00	120NFSG
		11-18-85	--	17.74	25.00	
		12-08-85	--	17.64	25.00	
		01-13-86	--	17.67	25.00	
		02-10-86	--	17.37	25.00	
		03-24-86	--	17.62	25.00	
		04-21-86	--	18.12	25.00	
		05-12-86	--	18.72	25.00	
		06-11-86	--	19.16	25.00	
		07-14-86	--	19.19	25.00	
		08-11-86	--	19.85	25.00	
302232087240501	USGS TH108,SE BRONSON FLD	09-07-86	--	18.48	25.00	120NFSG
302302087252501	USGS TH107,BRONSON FLD.	10-14-85	3.95	7.18	11.10	120NFSG
		11-18-85	4.88	6.25	11.10	
		12-08-85	4.64	6.49	11.10	
		01-13-86	4.43	6.70	11.10	
		02-10-86	4.95	6.18	11.10	
		03-24-86	4.57	6.56	11.10	
		04-21-86	4.74	6.39	11.10	
		05-12-86	3.93	7.20	11.10	
		06-11-86	3.28	7.85	11.10	
		07-14-86	4.19	6.94	11.10	
		08-11-86	3.55	7.58	11.10	
		09-07-86	4.06	7.07	11.10	
302302087252502	USGS TH107A,BRONSON FLD.	10-14-85	3.43	7.70	11.10	120NFSG
		11-18-85	5.67	5.46	11.10	
		12-08-85	5.12	6.01	11.10	
		01-13-86	4.25	6.88	11.10	
		02-10-86	4.64	6.49	11.10	
		03-24-86	4.91	6.22	11.10	
		04-21-86	3.87	7.26	11.10	
		05-12-86	3.28	7.85	11.10	
		06-11-86	3.05	8.08	11.10	
		07-14-86	2.76	8.37	11.10	
		08-11-86	2.24	8.89	11.10	
		09-07-86	3.15	7.98	11.10	
302320087214601	USGS TH109,TANTON RD	10-14-85	--	16.66	26.00	120NFSG
		11-18-85	--	15.87	26.00	
		12-08-85	--	15.82	26.00	
		01-13-86	--	15.76	26.00	
		02-10-86	--	15.72	26.00	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	ESCAMBIA--Continued					
02320087214601	USGS TH108,TANTON RD	03-24-86	--	15.74	26.00	120NFSG
		04-21-86	--	16.19	26.00	
		05-12-86	--	16.85	26.00	
		06-11-86	--	17.14	26.00	
		07-14-86	--	17.59	26.00	
		08-11-86	--	17.98	26.00	
		09-07-86	--	16.89	26.00	
302354087210501	USGS TH9-FRGSN AIR SERV.	10-14-85	--	17.45	26.00	120NFSG
		11-18-85	--	16.56	26.00	
		12-08-85	--	16.55	26.00	
		01-13-86	--	16.60	26.00	
		02-10-86	--	16.43	26.00	
		03-24-86	--	16.55	26.00	
		04-21-86	--	17.11	26.00	
		05-12-86	--	17.91	26.00	
		06-11-86	--	18.17	26.00	
		07-14-86	--	18.67	26.00	
		08-11-86	--	19.01	26.00	
		09-07-86	--	17.85	26.00	
54087210502	USGS TH9A-FRGSN AIR.SERV.	10-14-85	--	2.74	26.00	120NFSG
		11-18-85	--	1.57	26.00	
		12-08-85	--	1.26	26.00	
		01-13-86	--	1.20	26.00	
		02-10-86	--	0.84	26.00	
		03-24-86	--	1.31	26.00	
		04-21-86	--	2.16	26.00	
		05-12-86	--	3.36	26.00	
		06-11-86	--	2.70	26.00	
		07-14-86	--	2.76	26.00	
		08-11-86	--	3.77	26.00	
		09-07-86	--	1.57	26.00	
302355087200301	USGS TH31,1 MI.W.FAIRFLD	10-14-85	--	19.18	28.00	120NFSG
		11-18-85	--	17.62	28.00	
		12-08-85	--	17.86	28.00	
		01-13-86	--	18.02	28.00	
		02-11-86	--	17.68	28.00	
		03-24-86	--	17.74	28.00	
		04-21-86	--	18.78	28.00	
		05-12-86	--	19.79	28.00	
		06-11-86	--	20.12	28.00	
		07-14-86	--	21.27	28.00	
		08-11-86	--	21.00	28.00	
		09-07-86	--	19.68	28.00	
302432087182601	USGS TH3-72ND AVE.S.JKSN	10-14-85	--	16.26	31.00	120NFSG
		11-18-85	--	14.31	31.00	
		12-08-85	--	13.98	31.00	
		01-13-86	--	14.14	31.00	
		02-11-86	--	13.11	31.00	
		03-24-86	--	12.45	31.00	
		04-21-86	--	14.19	31.00	
		05-12-86	--	14.97	31.00	120NFSG
		06-11-86	--	15.55	31.00	
		07-14-86	--	17.93	31.00	
		08-11-86	--	17.74	31.00	
		09-07-86	--	17.04	31.00	
302435087141601	USGS TH104 ROMANA W.K ST	10-14-85	6.54	16.14	22.70	120NFSG
		11-18-85	7.29	15.39	22.70	
		12-08-85	8.50	14.18	22.70	
		01-13-86	8.42	14.26	22.70	
		02-11-86	9.26	13.42	22.70	
		03-24-86	8.12	14.56	22.70	
		04-21-86	7.78	14.90	22.70	
		05-12-86	6.37	16.31	22.70	
		06-11-86	7.81	14.87	22.70	
		07-14-86	4.83	17.85	22.70	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
		ESCAMBIA--Continued				
302435087141601	USGS TH104 ROMANA W.K ST	08-11-86	7.74	14.94	22.70	120NFSG
		09-07-86	8.91	13.77	22.70	
302459087154401	USGS TH103 KEYES COURT	10-14-85	7.92	45.88	53.80	120NFSG
		11-18-85	8.82	44.98	53.80	
		12-08-85	9.26	44.54	53.80	
		01-13-86	9.71	44.09	53.80	
		02-11-86	10.20	43.60	53.80	
		03-24-86	10.40	43.40	53.80	
		04-21-86	10.41	43.39	53.80	
		05-12-86	9.31	44.49	53.80	
		06-11-86	9.42	44.38	53.80	
		07-14-86	8.21	45.59	53.80	
		08-11-86	7.82	45.98	53.80	
		09-07-86	9.12	44.68	53.80	
302541087114501	USGS TH1-17TH&GONZALEZ ST	10-14-85	--	58.83	62.00	120NFSG
		11-18-85	--	58.68	62.00	
		12-08-85	--	57.75	62.00	
		01-13-86	--	57.73	62.00	
		02-11-86	--	57.52	62.00	
		03-24-86	--	57.24	62.00	
		04-21-86	--	57.11	62.00	
		05-12-86	--	57.43	62.00	
		06-11-86	--	56.83	62.00	
		07-14-86	--	56.97	62.00	
		08-11-86	--	57.03	62.00	
		09-07-86	--	56.96	62.00	
302541087114502	USGS THIA-17TH&GONZALEZ	10-14-85	--	57.36	62.00	120NFSG
		11-18-85	--	58.00	62.00	
		12-08-85	--	56.26	62.00	
		01-13-86	--	56.37	62.00	
		02-11-86	--	56.45	62.00	
		03-24-86	--	55.55	62.00	
		04-21-86	--	55.09	62.00	
		05-12-86	--	55.27	62.00	
		06-11-86	--	55.27	62.00	
		07-14-86	--	55.80	62.00	
		08-11-86	--	56.03	62.00	
		09-07-86	--	56.18	62.00	
302958087230001	USGS TH8-HURST HAMMOCK RD	10-14-85	--	80.04	103.00	120NFSG
		11-18-85	--	79.72	103.00	
		12-08-85	--	79.45	103.00	
		01-13-86	--	79.18	103.00	
		02-10-86	--	79.02	103.00	
		03-24-86	--	79.09	103.00	
		04-21-86	--	79.31	103.00	
		05-11-86	--	79.83	103.00	
		06-10-86	--	79.82	103.00	
		07-07-86	--	79.87	103.00	
		08-04-86	--	80.01	103.00	
		09-01-86	--	79.86	103.00	
303006087205201	USGS TH7-US 90 S OF JAMES	10-14-85	--	60.78	85.00	120NFSG
		11-18-85	--	61.39	85.00	
		12-08-85	--	62.02	85.00	
		01-13-86	--	60.59	85.00	
		02-10-86	--	60.22	85.00	
		03-24-86	--	59.89	85.00	
		04-21-86	--	60.27	85.00	
		05-11-86	--	60.77	85.00	
		06-10-86	--	60.89	85.00	
		07-07-86	--	61.20	85.00	
		08-04-86	--	61.42	85.00	
		09-01-86	--	61.29	85.00	

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEVATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEOLOGIC UNIT
		ESCAMBIA--Continued				
303018087192201	USGS TH5 8MI CRKADUNAWAY	10-14-85	--	52.24	74.00	120NFSG
		11-18-85	--	53.41	74.00	
		12-08-85	--	53.10	74.00	
		01-13-86	--	53.33	74.00	
		02-10-86	--	51.22	74.00	
		03-24-86	--	40.45	74.00	
		04-21-86	--	52.25	74.00	
		05-11-86	--	55.11	74.00	
		06-10-86	--	48.57	74.00	
		07-07-86	--	53.84	74.00	
		08-04-86	--	55.34	74.00	
		09-01-86	--	52.45	74.00	
303018087192202	USGS TH5A 8MI CRKADUNAWAY	10-14-85	--	40.63	74.00	120NFSG
		11-18-85	--	40.13	74.00	
		12-08-85	--	39.39	74.00	
		01-13-86	--	38.38	74.00	
		02-10-86	--	37.87	74.00	
		03-24-86	--	37.23	74.00	
		04-21-86	--	37.18	74.00	
		05-11-86	--	37.92	74.00	
		06-10-86	--	38.56	74.00	
		07-07-86	--	38.92	74.00	
		08-04-86	--	40.32	74.00	
		09-01-86	--	39.66	74.00	
303208087132701	USGS TH6 DAVID&BARRINGER	10-07-85	19.98	36.21	56.20	120NFSG
		11-11-85	20.24	35.95	56.20	
		12-02-85	20.28	35.91	56.20	
		01-06-86	20.73	35.46	56.20	
		02-03-86	20.96	35.23	56.20	
		03-03-86	21.43	34.76	56.20	
		04-05-86	21.45	34.74	56.20	
		05-05-86	21.02	35.17	56.20	
		06-02-86	21.08	35.11	56.20	
		07-07-86	20.60	35.59	56.20	
		08-04-86	20.50	35.69	56.20	
		09-01-86	20.48	35.73	56.20	
303216087194101	USGS TH29-CALICO DRIVE	10-14-85	--	56.6w	96.00	120NFSG
		11-18-85	--	56.63	96.00	
		12-08-85	--	56.46	96.00	
		01-13-86	--	56.15	96.00	
		02-10-86	--	55.83	96.00	
		03-24-86	--	55.46	96.00	
		04-21-86	--	55.49	96.00	
		05-11-86	--	55.80	96.00	
		06-10-86	--	55.88	96.00	
		07-07-86	--	56.22	96.00	
		08-04-86	--	56.44	96.00	
		09-01-86	--	56.46	96.00	
303251087150201	USGS TH20,10-MI RD.	10-07-85	30.93	69.18	100.00	120NFSG
		11-11-85	30.63	69.48	100.00	
		12-02-85	30.74	69.37	100.00	
		01-06-86	31.04	69.07	100.00	
		02-03-86	31.59	68.52	100.00	
		03-03-86	31.62	68.49	100.00	
		04-05-86	31.89	68.22	100.00	
		05-05-86	32.02	68.09	100.00	
		06-02-86	32.15	67.96	100.00	
		07-07-86	31.86	68.25	100.00	
		08-04-86	31.90	68.21	100.00	
		09-01-86	31.67	68.44	100.00	
303346087185401	USGS TH18-W.ROBERTS ROAD	10-07-85	--	77.33	124.00	120NFSG
		11-11-85	--	76.97	124.00	
		12-02-85	--	76.72	124.00	
		01-06-86	--	76.14	124.00	
		02-03-86	--	75.82	124.00	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
		ESCAMBIA--Continued				
303346087185401	USGS TH18-W.ROBERTS ROAD	03-03-86	--	75.58	124.00	120NFSG
		04-05-86	--	75.35	124.00	
		05-05-86	--	75.25	124.00	
		06-02-86	--	75.19	124.00	
		07-07-86	--	75.53	124.00	
		08-04-86	--	76.06	124.00	
		09-01-86	--	76.53	124.00	
303642087232301	USGS TH12-N.OF MUSCOGEE	10-07-85	--	77.85	118.00	120NFSG
		11-11-85	--	77.40	118.00	
		12-02-85	--	76.95	118.00	
		01-06-86	--	76.05	118.00	
		02-03-86	--	75.93	118.00	
		03-03-86	--	75.92	118.00	
		04-05-86	--	75.69	118.00	
		05-05-86	--	75.54	118.00	
		06-02-86	--	75.24	118.00	
		07-07-86	--	74.80	118.00	
		08-04-86	--	74.75	118.00	
		09-01-86	--	74.32	118.00	
303659087222001	USGS TH16-FARM HILL S-97	10-07-85	--	88.21	138.00	120NFSG
		11-11-85	--	87.93	138.00	
		12-02-85	--	87.81	138.00	
		01-06-86	--	87.45	138.00	
		02-03-86	--	87.42	138.00	
		03-03-86	--	87.22	138.00	
		04-05-86	--	87.10	138.00	
		05-05-86	--	87.42	138.00	
		06-02-86	--	87.56	138.00	
		07-07-86	--	87.99	138.00	
		08-04-86	--	88.23	138.00	
		09-01-86	--	88.35	138.00	
303723087182301	USGS TH28 EDEN RD	10-07-85	--	46.68	74.00	120NFSG
		11-11-85	--	46.25	74.00	
		12-02-85	--	45.91	74.00	
		01-06-86	--	44.69	74.00	
		02-03-86	--	45.77	74.00	
		03-03-86	--	45.35	74.00	
		04-05-86	--	45.06	74.00	
		05-05-86	--	45.84	74.00	
		06-02-86	--	45.63	74.00	
		07-07-86	--	45.34	74.00	
		08-04-86	--	45.71	74.00	
		09-01-86	--	45.39	74.00	
303958087233201	USGS TH13-S.CHRCHSE BR.	10-02-85	61.68	90.32	152.00	120NFSG
		12-11-85	62.29	89.71	152.00	
		02-06-86	62.93	89.07	152.00	
		04-02-86	63.13	88.87	152.00	
		06-11-86	62.77	89.23	152.00	
		08-05-86	62.65	89.35	152.00	
304008087211601	USGS TH27-4.5MI.N.CNTNMNT	10-07-85	--	116.14	156.00	120NFSG
		11-11-85	--	115.65	156.00	
		12-02-85	--	115.47	156.00	
		01-06-86	--	114.89	156.00	
		02-03-86	--	114.84	156.00	
		03-03-86	--	114.81	156.00	
		04-05-86	--	114.51	156.00	
		05-05-86	--	114.84	156.00	
		06-02-86	--	114.81	156.00	
		07-07-86	--	114.98	156.00	
		08-04-86	--	115.21	156.00	
		09-01-86	--	115.06	156.00	

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	FRANKLIN					
294337084532401	McCullogh Properties,Inc. well at Eastpoint, Fl	05-21-86	9.07	-3.07	6.00	120FLRD
		07-18-86	7.91	-1.91	6.00	
295046084394201	FRANKLIN NO 10	12-05-85	3.92	1.14	5.10	120FLRD
		04-09-86	3.93	1.13	5.10	
		05-21-86	4.42	0.64	5.10	
		07-18-86	1.19	3.87	5.10	
295732084430701	FRANKLIN 41	12-05-85	14.06	-4.05	10.00	120FLRD
		05-21-86	13.25	-3.24	10.00	
	GADSDEN					
304056084502501	CITY OF CHATTAHOOCHEE ABAND WELL NR CHATTAHOOCHE	11-18-85	59.03	58.97	118.00	120FLRD
		05-22-86	59.34	58.66	118.00	
	GULF					
300338085204201	FICO FARMS OBS. WELL(600) NR. OVERSTREET FL.	10-09-85	18.34	6.66	--	120FLRD
		11-15-85	18.79	6.21	--	
		02-03-86	19.74	5.26	--	
		04-01-86	20.20	4.80	--	
		05-14-86	16.60	8.40	--	
		07-23-86	16.50	8.50	--	
		09-08-86	18.60	6.40	--	
	HAMILTON					
303622083050601	LOCAL NO.036-305-1	10-23-85	37.63	--	149.00	120FLRD
		12-06-85	46.90	--	149.00	
		12-23-85	52.53	--	149.00	
		01-29-86	53.57	--	149.00	
		02-19-86	69.81	--	149.00	
		03-24-86	56.78	--	149.00	
		04-22-86	46.52	--	149.00	
		05-27-86	40.63	--	149.00	
		06-19-86	38.92	--	149.00	
		07-29-86	35.85	--	149.00	
		08-27-86	36.78	--	149.00	
		09-23-86	36.46	--	149.00	
	HOLMES					
304626085410301	BLITCHES RESTAURANT - BONIFAY FL	11-14-85	100.30	28.70	129.00	120FLRD
		05-13-86	105.80	23.20	129.00	
305119085561901	LOCAL NO.051-556-1	11-14-85	74.20	211.48	286.00	120FLRD
		05-12-86	77.31	208.37	286.00	
305828085350901	HOLMES 7 BUSH	11-14-85	157.84	16.44	174.00	120FLRD
		05-12-86	159.28	15.00	174.00	
	JACKSON					
304918084565601	NORTH OF SNEADS	11-18-85	87.86	22.14	110.00	120FLRD
		05-22-86	88.31	21.69	110.00	
304918085124201	RETTIG N. OF MARIANNA	05-15-86	75.25	24.75	100.00	120FLRD
305353085273101	LOCAL NO. 053-527-1	11-14-85	116.77	77.82	195.00	120FLRD
		05-12-86	117.82	76.77	195.00	
305947085243001	WELCOME STAT. N OF CAMBELLTON	11-14-85	133.92	18.08	152.00	120FLRD
		05-12-86	136.56	15.44	152.00	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEVATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEOLOGIC UNIT
	JEFFERSON					
303001083553401	Joseph Bellamy well near Monticello, Fl.	10-01-85	35.37	139.63	175.00	120FLRD
		12-03-85	37.42	137.58	175.00	
		02-05-86	40.34	134.66	175.00	
		04-14-86	41.43	133.57	175.00	
		05-20-86	38.75	136.25	175.00	
		07-17-86	36.45	138.55	175.00	
		08-26-86	36.17	138.83	175.00	
	LEON					
301801084144501	ROY WHITTINGTON WELL NR WOODVILLE,FL	12-04-85	10.84	23.16	34.00	120FLRD
		05-20-86	9.25	24.75	34.00	
302410084200001	LOCAL NO.024-420-1	12-04-85	28.53	8.98	37.50	120FLRD
		02-05-86	29.21	8.30	37.50	
		04-09-86	29.92	7.59	37.50	
		05-20-86	27.55	9.96	37.50	
		07-16-86	25.30	12.21	37.50	
		09-08-86	26.83	10.68	37.50	
302410084200002	LOCAL NO.024-420-2 (150-A)	12-04-85	33.55	3.97	37.50	110NRSD
		02-05-86	32.71	4.81	37.50	
		04-09-86	31.63	5.87	37.50	
		05-20-86	31.47	6.05	37.50	
		07-16-86	30.26	7.26	37.50	
		09-08-86	32.04	5.48	37.50	
302518084192401	LOCAL NO.025-419-441	12-04-85	26.05	63.81	89.90	120FLRD
		05-20-86	26.15	63.71	89.90	
303447084072401	LOCAL NO.034-407-1	12-03-85	52.71	169.99	223.00	120FLRD
303447084072401	LOCAL NO.034-407-1	05-19-86	58.40	164.30	223.00	120FLRD
	LEVY					
291004082382901	91023801 15S16E24 910238433 DIXIE LIME PR	05-14-86	24.10	--	29.20	120FLRD
		09-15-86	26.55	--	29.20	
291048083011801	15S13E17 910301212	05-13-86	0.26	--	8.40	120FLRD
		09-15-86	3.06	--	8.40	
291508082432901	GULF HAMMOCK	05-13-86	9.46	--	13.20	120FLRD
		09-15-86	10.88	--	13.20	
291712082351801	SOUTH OF BONSON-RO	09-15-86	48.51	--	103.00	120FLRD
291806082545601	918254331 13S14E33 TEST 2 USGS	05-13-86	18.94	--	24.00	120FLRD
		09-15-86	21.69	--	24.00	
292310082373701	ERCELL SMITH	05-14-86	54.83	--	61.40	120FLRD
		09-16-86	56.38	--	61.40	
292507082560201	AJ MIMS	09-17-86	11.27	--	33.00	120FLRD
292640082381201	92623801 12S17E17 926238241 HARDEE HOTEL	05-13-86	53.16	--	69.00	120FLRD
		09-16-86	55.93	--	69.00	
	LIBERTY					
300152084592701	LOCAL NO.001-459-1	11-20-85	24.39	5.11	29.50	120FLRD
		05-21-86	22.83	6.67	29.50	
300813084555701	PLACID OIL CO SUPPLY WELL	11-20-85	38.57	13.43	52.00	120FLRD
		05-21-86	45.32	6.68	52.00	
		07-18-86	44.38	7.62	52.00	
		09-12-86	46.24	5.76	52.00	
301035084403701	PORTER LAKE REC AREA	11-20-85	31.87	-9.40	22.30	120FLRD
		05-22-86	31.27	-9.00	22.30	
302823084560601	ST. JOE PAPER CO. WELL N. OF BRISTOL,FLA.	11-19-85	127.07	87.43	214.00	120FLRD
		05-22-86	128.14	86.36	214.00	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEVATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEOLOGIC UNIT
	MADISON					
302822083255501	LOCAL NO.18 MADISON	10-25-85	72.76	--	101.00	120FLRD
		12-06-85	74.80	--	101.00	
		12-31-85	78.37	--	101.00	
		01-29-86	79.58	--	101.00	
		02-24-86	85.12	--	101.00	
		03-25-86	84.84	--	101.00	
		04-25-86	81.01	--	101.00	
		05-28-86	77.72	--	101.00	
		06-23-86	76.13	--	101.00	
		07-28-86	74.34	--	101.00	120FLRD
		09-04-86	74.42	--	101.00	
		09-26-86	74.06	--	101.00	
	OKALOOSA					
302338086352601	WAYSIDE PARK	10-29-85	-103.33	115.33	12.00	120FLRD
		01-22-86	-96.42	108.42	12.00	
		05-07-86	-104.89	116.89	12.00	
		07-15-86	-112.95	124.95	12.00	
		09-09-86	-108.32	120.32	12.00	
302431086440301	BILL COLLIER WELL AT FLOROSA,FL	11-05-85	-60.89	69.89	9.00	120FLRD
		01-22-86	-57.22	66.22	9.00	
		03-18-86	-55.94	64.94	9.00	
		05-07-86	-64.77	73.77	9.00	
302857086310701	B-910 EGLIN HARDSTAND 1	11-05-85	-54.36	120.36	66.00	120FLRD
		01-23-86	-51.14	117.14	66.00	
		03-18-86	-50.60	116.60	66.00	
		05-08-86	-73.02	139.02	66.00	
		07-16-86	-78.55	144.55	66.00	
		09-10-86	-71.98	137.98	66.00	
303021086351601	B-4204 EGLIN 27 FLD 4-2	10-30-85	-32.37	121.70	89.30	120FLRD
		03-18-86	-26.95	116.28	89.30	
		05-08-86	-35.40	124.73	89.30	
		07-16-86	-38.20	127.53	89.30	
		09-10-86	-40.85	130.18	89.30	
303745086442101	B-6204 EGLIN 31	10-30-85	20.86	114.24	135.00	120FLRD
		05-08-86	19.34	115.76	135.00	
304518086334001	CRESTVIEW NO 4	10-28-85	65.38	164.62	230.00	120FLRD
		05-06-86	63.57	166.43	230.00	
304801086403101	BAKER NO 1	11-06-85	68.10	176.90	245.00	120FLRD
		05-05-86	65.18	179.82	245.00	
305530086322701	W.D.FLOURNOY JR. WELL	11-06-85	155.58	23.42	179.00	120FLRD
		05-05-86	156.46	22.54	179.00	
305615086284801	FLA FOR.SER. LAUREL HILL	10-28-85	170.83	119.17	290.00	120FLRD
		05-05-86	173.01	116.99	290.00	
	UNION					
300101082245201	LOCAL NO.001-224-1	05-13-86	58.10	--	152.00	120FLRD
		09-15-86	55.92	--	152.00	
300615082130501	RAIFORD	05-13-86	59.34	--	149.00	120FLRD
		09-15-86	56.90	--	149.00	
	WAKULLA					
300540084174001	WAKULLA 19	12-04-85	7.58	1.41	9.00	120FLRD
		05-20-86	7.19	1.80	9.00	
300917084121301	LOCAL NO.2 ST. MARKS	12-04-85	1.98	1.77	3.80	120FLRD
		05-20-86	2.75	1.00	3.80	

MISCELLANEOUS WATER LEVEL MEASUREMENTS

OCTOBER 1985 TO SEPTEMBER 1986

STATION NUMBER	STATION NAME	DATE OF SAMPLE	ELEV-ATION ABOVE NGVD (FEET)	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET)	ELEV. OF LAND SURFACE DATUM (FT. ABOVE NGVD)	GEO-LOGIC UNIT
	WAKULLA--Continued					
301115084241201	ARRAN WORK CENTER	12-05-85	30.53	4.47	35.00	120FLRD
		05-20-86	27.83	7.17	35.00	
301156084103501	LOCAL NO.011-410-1	12-04-85	6.29	0.87	7.00	120FLRD
		07-17-86	5.41	1.55	7.00	
	WALTON					
302442086130701	S L MATTHEWS WELL	10-29-85	4.69	0.31	5.00	120FLRD
		01-22-86	4.98	0.02	5.00	
		03-19-86	5.67	-0.67	5.00	
		05-07-86	4.50	0.50	5.00	
		07-15-86	1.79	3.21	5.00	
		09-09-86	1.74	3.26	5.00	
303053086075301	J M THOMPSON WELL	11-04-85	18.22	41.57	59.80	120FLRD
		05-06-86	18.52	41.27	59.80	
303434086130301	B-8631 EGLIN AFB	11-06-85	35.41	105.13	141.00	120FLRD
		05-06-86	27.96	112.58	141.00	
303454085560601	WELL 43	11-04-85	26.31	149.69	176.00	120FLRD
		05-06-86	25.15	150.85	176.00	
303954086133801	USAF EGLIN C-62	11-05-85	79.42	135.46	215.00	120FLRD
		05-06-86	80.16	134.72	215.00	
304044086211601	B-1204 EGLIN LOCAL NO 19	11-05-85	76.96	153.75	231.00	120FLRD
		05-05-86	74.62	156.09	231.00	
304334086032401	ARGYLE TOWER FFS	11-14-85	83.84	177.16	261.00	120FLRD
		05-12-86	84.90	176.10	261.00	
304358086120801	BSA CAMP LK EUCHEE WELL	11-06-85	121.30	152.70	274.00	120FLRD
		05-05-86	122.80	151.20	274.00	
305043086083301	RAY PETER WELL	11-06-85	182.73	96.27	279.00	120FLRD
		05-05-86	185.00	94.00	279.00	
305247086030901	WELL 52	11-14-85	112.65	192.12	305.00	120FLRD
		05-12-86	110.00	194.77	305.00	
305359086122601	JACKSON STILL TOWER	10-28-85	190.33	69.67	260.00	120FLRD
		05-05-86	192.40	67.60	260.00	
305804086180901	FLA WELCOME STA PAXTON	10-28-85	210.74	113.26	324.00	120FLRD
		05-05-86	214.26	109.74	324.00	
	WASHINGTON					
304441085331101	I-10/SR77 S OF CHIPLEY	11-14-85	51.62	71.38	123.00	120FLRD
		05-13-86	57.23	65.77	123.00	

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CALENDAR FOR WATER YEAR 1986

1985

OCTOBER

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1986

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